NATIONAL MUSEUM
OF VICTORIA

CELEBERRIMÆ

ACADEMIÆ CANTABRIGIENSI,

ARTIUM OMNIUM HUMANIORUM

PATROCINIUM

AMICISSIME SUSCIPIENTI,

OCTAVUM HUNC

NATURÆ VIVARII

FASCICULUM,

D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

TO

THE UNIVERSITY

OF

CAMBRIDGE,

THE

FRIEND AND PATRONESS

OF

SCIENCE,

THIS EIGHTH VOLUME

OF THE

NATURALIST's MISCELLANY,

IS

MOST RESPECTFULLY INSCRIBED,

BY

GEORGE SHAW,

FREDERICK P. NODDER.

ANAS LOBATA.

Character Genericus.

Roſtrum lamelloſo-dentatum, convexum, obtuſum.
Lingua ciliata, obtuſa.

Lin. Syſt. Nat. p. 194.

Character Specificus.

ANAS NIGRICANS, tranſverſim griſeo-lineata, ſubtus pallidior, roſtro ſubtus lobato.

Diſtinguitur hæc avis, jam primo deſcripta, vultu non tam venuſto quam novo et ſibi peculiari. Color ejus generalis cinereus eſt, collo et inferioribus partibus longe pallidioribus, huc illuc obſcure maculatis. Per dorſum fuſco-nigricans et quaſi fuligineum tranſverſe ducuntur lineæ plurimæ albidæ, atomique innumeri concolores, ut cernere eſt in Caprimulgo Europæo. Præcipuam autem habet avis diſtinctionis notam, carunculam nigram, planam, orbiculatam, magnam, quæ longitudinalis dependet a mandibula inferiore. Roſtri nigri lata eſt baſis, marginibus admodum pectinatis. Nigrant quoque pedes. Cauda acuminata. Rariſſima hæc avis in Auſtralaſia innaſcitur, eamque in Britanniam intulit

intulit Dominus Archibaldus Menzies, qui una cum Domino Vancouver iter nauticum nuperrime perfecit, explorationis cauſa. Magnitudo eſt quaſi Anatis Boſchadis. Aſſervatur ſpecimen in Muſeo Britannico.

London Published Sept.r 1st 1796 by F.P. Nodder & Co.s N.o 15 Brewer Street.

THE

LOBATED DUCK.

Generic Character.

Bill broad and flattened; the edges marked with ſharp lamellæ.

Tongue broad and ciliated at the edges.

Specific Character.

BLACKISH DUCK, lineated tranverſely with greyiſh, paler beneath: the under mandible lobated beneath.

This bird, which is an entirely new and hitherto undeſcribed ſpecies, is leſs remarkable for the beauty than the ſingularity of its appearance. Its general colour is cinereous, which on the neck and lower parts is much lighter than on the upper, as well as marked obſcurely by ſeveral duſky ſpots. The back is of a very deep aſh-colour, or fuliginous blackiſh; marked with numerous tranverſe whitiſh lines, together with innumerable freckles of a ſimilar colour, not unlike thoſe on the back and wings of the common Goatſucker, or Caprimulgus Europæus; but the moſt ſingular character of the bird is a large, black, flat, orbicular flap or wattle, ſeated longitudinally

tudinally beneath the lower mandible. The bill is broad at the baſe; much pectinated at the edges, and black: the legs are alſo of the ſame colour: the tail is of a ſharpened form. This curious ſpecies is a native of New Holland, and is about the ſize of a common Duck. The ſpecimen is preſerved in the Britiſh Muſeum, and was brought over by Mr. Archibald Menzies, who accompanied Captain Vancouver in his late voyage.

BUPRESTIS GIGANTEA.

Character Genericus.

Antennæ filiformes, ſerratæ, longitudine thoracis.
Palpi quatuor, filiformes; articulo ultimo obtuſo truncato.
Caput dimidium intra thoracem retractum.
Lin. Syſt. Nat. Gmel. p. 1926.

Character Specificus.

BUPRESTIS elytris faſtigiatis, bidentatis, rugoſis, thorace marginato lævi, corpore inaurato.
Lin. Syſt. Nat. p. 659.
CERAMBYX INDIÆ orientalis maximus.
Grew. mus. 165. t. 13.
CANTHARIS maxima elytris cuprei coloris ſulcatis.
Sloan. jam. 2. p. 210. t. 236. f. 1. 2.
BUPRESTIS GIGANTEA.
Degeer. inſ. 4. p. 134. n. 1.

Bupreſtidis generi peculiaris eſt quidam et quaſi metallicus ſplendor, qui in nonnullis ſpciebus, exoticis

ticis præcipue, adeo dominatur, ut aurum cuprumve ſumma arte politum æmuletur. Tinguntur quædam ſpecies colore aureo-viridi, cui cedit longe quicquid pigmenti eſt aut vernicis. Illam de qua jam agitur vincunt multæ fulgido colore, nullæ magnitudine; cumque larvam ejus notaverit et eleganter depinxerit Domina Merian, viſum eſt ut melius explicetur genus, illam ipſam una cum inſecto inſpiciendam offerre. Larva ad magnitudinem qua depingitur creſcere, et prope radices plantarum degere ſolet. Plene aucta dormit ad tempus cava ſub humo, cuteque exteriore exuta, in pupam ſeu chryſalidem mutatur, e qua, elapſo quodam ſpatio, emergit inſectum perfectum; cujus color generalis eſt quaſi cupri politi, thoracis elytrorumque marginibus plus minus viridi tinctis. Elytrorum ſuperficies eſt paulum ſcabroſa et rugoſa, ſtriis aliquot in longitudinem ductis quaſi coſtata.

Notandum eſt antennas Bupreſtidis giganteæ non mere ſetaceas esse, ut plerisque ejuſdem generis, ſed lamellis paululum pectinari. Americam Auſtralem incolit pulcherrimum hoc inſectum.

THE

GREAT BUPRESTIS.

Generic Character.

Antennæ filiform, and ſometimes ſerrated; of the length of thorax.

Feelers or *Palpi* filiform: with the laſt joint obtuſe or truncated.

Head partly retracted under the thorax.

Specific Character.

COPPER-COLOURED BUPRESTIS with a gloſs of green-gold; the wing-ſhells wrinkled, and bidentated at the extremities.

The GREAT COPPER-COLOURED BUPRESTIS.

The GREAT GOGGLE-EYED BEETLE.

Grew's Muſeum Reg. Soc.

Merian Sur. pl. 50.

The genus Bupreſtis is remarkable for the metallic ſplendor by which moſt of the exotic ſpecies are diſtinguiſhed; and which in ſome is ſo great as to equal the appearance of the moſt highly-poliſhed gold

gold or copper: others are ornamented with a tinge of golden green, which far exceeds the appearance of all artificial painting or varniſh. The preſent ſpecies, though leſs rich in colour than ſeveral others, is the largeſt of the whole genus; and as its larva has been obſerved and well figured by Madam Merian, I have thought it not improper, as an elucidation of the genus, to add the larva as repreſented by that lady, to the figure of the compleat inſect. This larva grows to the ſize repreſented, and reſides near the roots of plants: when fully grown, it lies dormant for ſome time in a ſmall cavity beneath the ſurface of the ground, and, caſting its exterior ſkin, becomes a pupa or chryſalis, out of which, after a certain ſpace, proceeds the perfect inſect. Its general colour is that of highly-poliſhed copper; the edges of the thorax and wing-caſes tinged more or leſs with green. The wing-caſes are of a roughiſh or wrinkled ſurface, and ſlightly ribbed longitudinally. It is to be alſo obſerved that the antennæ, which in moſt of the genus are ſimply ſetaceous, are in the preſent ſpecies of a ſomewhat lamellated or pectinated appearance. This beautiful inſect is a native of South America.

CHITON SQUAMOSUS.

Character Genericus.

Animal Doris.

Teſtæ plures, longitudinaliter digeſtæ dorſo incumbentes.

Lin. Syſt. Nat. p. 1106.

Character Specificus, &c.

CHITON teſta octovalvi ſemiſtriata, margine ſquamuloſo.

CHITON teſta octovalvi ſemiſtriata, corpore ſquamuloſo.

Lin. Muſ. Ulr. 465.

CHITON ſquamoſus, teſta ſeptemvalvi.

Chemn. Chiton. t. 1. f. 4.

Rupibus adhæret, ut plurimum, genus *Chiton*, patellarum more; continetque ſpecies ſatis numeroſas, quibus ſi negarit natura pulchritudinem, miram certe conceſſit conformationem, e plurimis quaſi zonis teſtaceis conſtantem. Oras incolit Americanas ſpecies quam depinximus, inter maximas habita ſui

ſui generis: color ejus cæruleo-vireſcens venulis atomiſque obſcurioribus variatur.

Suave eſt philoſopho contemplari generalem quandam ſimilitudinem, quæ interdum mira et manifeſta eſt in animalibus penitus diverſis, nec ulla affinitate inter ſe conjunctis. In hoc ipſo ſcilicet *Chitonis* genere, teſta qua obducitur animal loricæ ſimillima eſt qua muniuntur *Daſypodes*. Quod contigit quoque inſectis quæ continet *Oniſci* genus; quorum ſpecies communis, quæ et officinalis dicitur, hanc ipſam ob cauſam nomine Linnæano *Oniſcus Armadillo* nuncupatur.

THE

SCALY CHITON.

GENERIC CHARACTER.

Animal reſembling a Doris.

Shell conſiſting of ſeveral ſegments diſpoſed longitudinally in the back.

SPECIFIC CHARACTER.

CHITON with the ſhell commonly conſiſting of eight valves; the margin ſcaly.

The genus Chiton is generally found adhering to rocks, like ſome of the Lepades. The ſpecies, which are pretty numerous, are leſs remarkable for beauty than for ſingularity of ſtructure; being compoſed of ſeveral diſtinct ſhelly bounds. The ſpecies here repreſented is one of the largeſt, and is a native of the American coaſts. Its general color is a blueiſh green, variegated with veins and ſpecks of darker and lighter colors. It is curious to contemplate the ſimilarity in point of general form, which ſometimes takes place between animals of the moſt diſtant tribes, and which have no real affinity to each other. Thus in the preſent genus, the inhabiting animals are covered with an armour reſembling that of

of the Daſypodes or Armadillos amongſt quadrupeds; and the inſects of the genus Oniſcus are formed on a ſimilar plan; the officinal or common ſpecies in particular, which has obtained its trivial name from this very circumſtance.

PSITTACUS PALLIDUS.

Character Genericus.

Roſtrum aduncum: mandibula inferiore mobili; cera inſtructa.
Nares in roſtri baſi.
Lingua carnoſa, obtuſa, integra.
Pedes ſcanſorii.

Lin. Syſt. Nat. p. 139.

Character Specificus, &c.

PSITTACUS FLAVUS, alis albidis roſaceo leviter tinctis, vireſcenteque, pro luce, variatis.

In Auſtralaſia innaſcitur nova hæc ſpecies, cujus vera magnitudo in tabula depingitur.

THE

PALE PARRAKEET.

GENERIC CHARACTER.

Bill hooked: upper mandible moveable.
Noſtrils round, placed in the baſe of the bill.
Tongue fleſhy, broad, blunt at the end.
Legs ſhort. Toes formed for climbing, viz. two toes forward, and two backward.

SPECIFIC CHARACTER.

YELLOW PARRAKEET with whitiſh wings, ſlightly tinctured with roſe-color, and with a caſt of greeniſh according to the direction of the light.

This bird, which is a native of Auſtralaſia, is entirely new, and is repreſented in its natural ſize.

R.N

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MEDUSA ANDROMEDA.

Character Genericus.

Corpus gelatinoſum, orbiculatum, depreſſum.
Os ſubtus, centrale.

Lin. Syſt. Nat. p. 1096.

Character Specificus.

MEDUSA fuſco-pallens, brachiis ſubtus octo ramoſiſſimis foliaceis.

MEDUSA hemiſphærica, marginis brachiis nullis, brachiis octo teretibus ramoſiſſimis inferius foliaceis.

Lin. Syſt. Nat. Gmel. p. 3157.
Forſk. F. Ægypt. Arab. p. 106. n. 18.

Major ſæpenumero eſt Meduſa Andromeda, quam hæc quæ in tabula oſtenditur. Color communis eſt ſubflavo-fuſcus, habens interdum aliquid ſubcærulei. Pellucet fere totum animal; nec modicam ei affert pulchritudinem artuum ſeu tentaculorum e medio corpore provenientium quaſi ramuloſa diviſio. In mari rubro invenitur.

THE

EGYPTIAN MEDUSA.

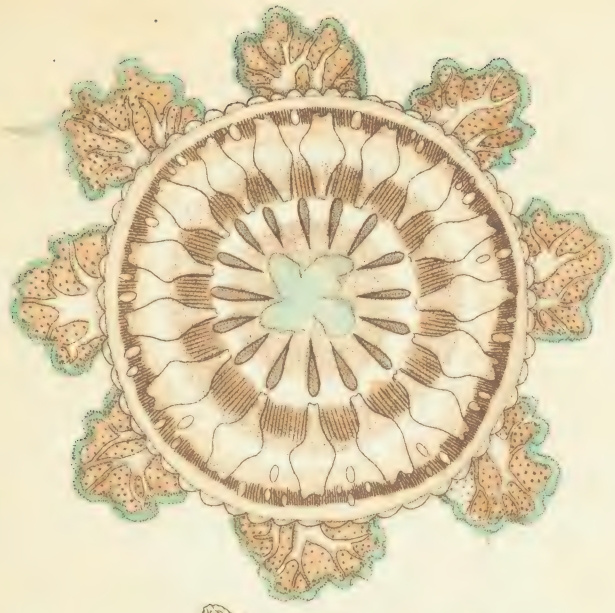
GENERIC CHARACTER.

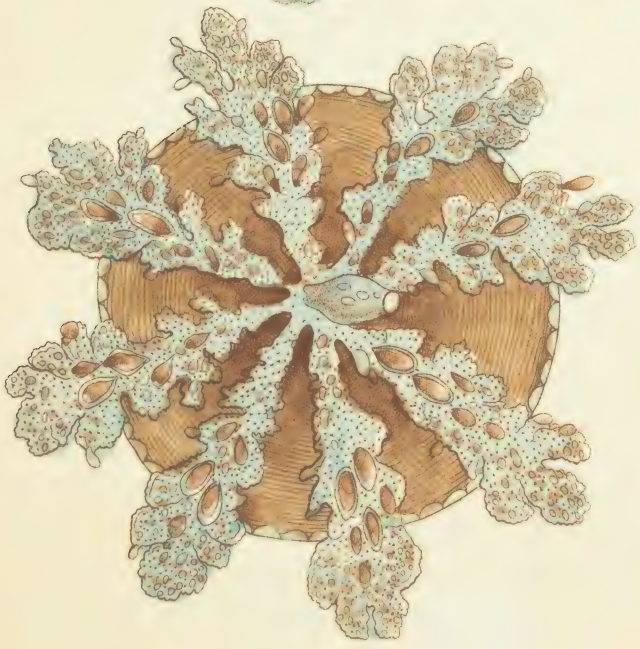
Body gelatinous, orbicular, commonly depreſſed. *Mouth* central, beneath.

SPECIFIC CHARACTER.

PALE-BROWN MEDUSA, with eight ramified foliaceous tentacula beneath.

The Meduſa Andromeda is frequently found conſiderably larger than repreſented on the preſent plate. Its general color is a pale yellowiſh-brown, ſometimes inclining to blueiſh. The whole animal has a conſiderable degree of tranſparency, and is remarkable for the elegantly ramified ſubdiviſions or proceſſes of the limbs or tentacula proceeding from the lower part of the body. It is a native of the Red ſea.





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HOLOTHURIA INHÆRENS.

Character Genericus.

Corpus liberum, nudum, gibbum, ano terminali.
Tentacula plura in altera extremitate.
Os inter tentacula.

Lin. Syſt. Nat. p. 1089.

Character Specificus.

HOLOTHURIA fuſca, tentaculis duodenis, corpore lineis longitudinalibus pallidis.

HOLOTHURIA tentaculis duodenis, corpore papilloſo ſexfariam lineato.

Lin. Syſt. Nat. Gmel. p. 3141.

FISTULARIA RECIPROCANS.

Forſk. F. Ægypt. Arab. p. 121. t. 38. f. A.

Differt a cæteris pleriſque congeneribus hæc Holothuria, quod longior multo ſit et gracilior. Color plerumque fuſco-ſaturatior, in longitudinem ductis pluribus lineis pallidioribus, non ſemper tamen clare conſpicuis. Aſpergitur ſuperficies totius animalis papillis ſeu tuberculis innumeris minutiſſimis, ſine

ſine vitro optico ægre cernendis; quorum ope tangentis manus arcte adeo adhæret, ut ab ea non ſine labore poſſit ſejungi. Generant hanc Holothuriam plagæ orientales.

BROWN HOLOTHURIA.

Generic Character.

Body unfixed, naked, gibbous, with an open extremity.

Tentacula numerous, ſurrounding one extremity.

Mouth ſituated amidſt the tentacula.

Specific Character.

BROWN HOLOTHURIA with twelve red tentacula: the body marked with longitudinal pale ſtripes.

This ſpecies is of a much longer and ſlenderer form than moſt others of the genus: its color is commonly a darkiſh brown, with ſeveral longitudinal ſtripes of a lighter caſt, and which are not always diſtinctly viſible. The ſurface of the whole animal is cloſely beſet with innumerable papillæ, ſcarcely viſible without the aſſiſtance of a glaſs. By means of theſe it adheres tenaciouſly to the hand on touching, ſo as with difficulty to be ſeparated from the ſkin. It is a native of the Eaſtern parts of the world.

MOTACILLA SIALIS.

Character Genericus.

Roſtrum ſubulatum, rectum: mandibulis ſubæqualibus.
Nares obovatæ.
Lingua lacero-emarginata.

Lin. Syſt. Nat. p. 328.

Character Specificus, &c.

MOTACILLA cærulea, ſubtus rufa.

MOTACILLA cærulea, ſubtus tota rubra, abdomine albo.

Lin. Syſt. Nat. p. 336.
Lin. Syſt. Nat. Gmel. p. 989.

RUBECULA CAROLINENSIS.

Briſſ. av. 3. p. 423.

AVIS CÆRULEA.

Kalm. it. 3. p. 30.

RUBECULA AMERICANA CÆRULEA.

Cateſb. 1. p. 47. t. 47.

NATIONAL MUSEUM OF VICTORIA

Motacilla Sialis, eadem quaſi magnitudine ac Motacilla Rubecula, aut paulo ampliore, Americam ſeptentrionalem inhabitat; præcipue Carolinam. Tota avis amoene cærulea eſt, exceptis pectore et abdomine leviter rubentibus, remigibuſque alarum primoribus apice fere nigricantibus. Roſtrum nigrum. Pedes fuſci. Inſectis veſcitur more reliqui generis.

London Published Nov.r 1st 1796 by J. P. Nodder & Co.y N.o 92 Newman Street near Oxford Street

THE

BLUE REDBREAST.

GENERIC CHARACTER.

Bill ſubulate, ſtrait; mandibles nearly equal.
Noſtrils nearly oval.
Tongue jagged or lacerated towards the tip.

SPECIFIC CHARACTER, &c.

BLUE MOTACILLA, rufous beneath.

The BLUE WARBLER.

Lath. Syn. 4. p. 446.
Pennt. Arct. Zool. 2. No. 282.

The BLUE REDBREAST.

Edw. 1. pl. 24.

This bird, which is about the ſame ſize with the common Redbreaſt, or rather larger, is an inhabitant of North America, and is principally ſeen in Carolina: the whole bird is of a fine blue, the breaſt and abdomen excepted, which are of a light red, and the tips of the principal wing-feathers, which are duſky; the bill is black, and the legs brown. It feeds on inſects, like the reſt of this genus.

THE

TELESCOPE CARP.

Generic Character.

Mouth (in moſt ſpecies) toothleſs.
Gill-membrane with three rays.
Body ſmooth.

Specific Character, &c.

SCARLET CARP, with protuberant eyes, all the fins half white; the tail trifid.

The SCARLET CARP.

The GOGGLE-EYED CARP.

The TELESCOPE.

OEIL de DRAGONS.

Sauvigny, Hiſt. Nat. des Dorades, pl. 10, 11, 12, &c.

The ſcarlet Carp, ſo remarkable for its brilliant color, is a native of China, and is equal, if not ſuperior, in ſize to the common gold-fiſh, to which it is extremely nearly allied.

PHALÆNA LUNA.

Ch. racter Genericus.

Antennæ ſetaceæ, a baſi ad apicem ſenſim attenuatæ.

Alæ (ſedentis) ſæpius deflexæ. (Volatu nocturno.)
Lin. Syſt. Nat. p. 808.

Character Specificus, &c.

PHALÆNA alis viridi-pallentibus, inferioribus caudatis; omnibus ocello diſci lunato.

PHALÆNA alis caudatis concoloribus vireſcentibus; ocello diſci lunato.
Lin. Syſt. Nat. Gmel. p. 2404.

PHALÆNA LUNA.
Lin. Syſt. Nat. p. 810.
Cramer. 1. t. 2. A. & 3. t. 31. A. B.
Drury inſ. 1. t. 24.

Inſolitæ eſt pulchritudinis Phalæna Luna, alis omnibus pulcherrime viridi-pallentibus, ſuperiorum margine antico fuſco-purpureo. Alæ poſticæ excurrunt quaſi in caudas. Alarum omnium mediam partem

partem ornat macula hyalina, non abſimilis oculo. Generat phalænam Lunam America ſeptentrionalis, variæque partes provinciarum Britannicarum, nuperrime fœderatarum.

LUNA.

Generic Character.

Antennæ or *Horns* ſetaceous, decreaſing in ſize from the baſe to the point.
Wings, when at reſt, generally deflected.
Flight moſtly nocturnal.

Specific Character, &c.

LARGE PEA-GREEN PHALÆNA, with the lower wings tailed, and a lunated tranſparent ſpot on each wing.

The large caudated pea-green PHALÆNA.

The pea-green CAROLINA MOTH.

The Phalæna Luna is an inſect of unuſual elegance. The wings are of a beautiful pea-green; the upper edge of the ſuperior pair marked by a band of purpliſh-brown: the lower ones are terminated by a pair of lengthened proceſſes or tails, and in the middle of each wing is a tranſparent ſpot, reſembling an eye. It is a native of North America, and is found in many parts of the United Britiſh States.

GORGONIA SANGUINOLENTA.

Character Genericus.

Animal creſcens plantæ facie.
Stirps cornea, oſſea, vel lapidea.
Cortex mollis, oſculis polypiferis.

Character Specificus, &c.

GORGONIA depreſſa ramoſiſſima dichotomo-pinnata, corticis flavi poris diſtichis purpureis.

Pall. el. zooph. p. 175.

GORGONIA SANGUINOLENTA.

Lin. Syſt. Nat. Gmel. p. 3087.

Luculente adeo et accurate explicuit hanc ſpeciem celeberrimus Pallas in opere cui titulus *Elenchus Zoophytorum* ut ipſiſſima auctoris verba ſine ulla immutatione tranſcribere non dubitaverim.

" *Magnitudo* pedalis vel ultra, multa tamen ſpecimina palmo non altiora occurrunt. *Truncus* in eodem conſtanter plamo ramoſus; *Rami* pinnati, *ramulis* paſſim ſine ordine dichotomis, ſubdiviſis, ſæpe

ſæpe faſtigiatis. *Stirps* tota depreſſo-plana. *Lignum* corneum, colore et ſubſtantia. *Cortex* calcareus, citrinus, extus lævis. *Pori* crebri, ramulis prominuli, in marginibus ramorum duplici utrinque ſerie diſpoſiti, ſparſive, halone ruberrime roſeo incluſi. Pumila ſpecimina pinnata, procera ramoſiora ſunt."

PURPLE-SIDED GORGONIA.

Generic Character.

Animal growing in the form of a plant.
Stem of a horny, oſſeous, or even lapideous ſubſtance.
Bark ſoft, marked with numerous polype-cells.

Specific Character, &c.

Flat, branched, pinnated GORGONIA, with yellow bark and double-rowed purple pores.

Purple-ſpotted yellow GORGONIA.

The deſcription of this Gorgonia, by Dr. Pallas, is ſo accurate, that it is unneceſſary to add any thing to the account given by that celebrated Naturaliſt, who informs us that it ſometimes grows to the height of a foot or more; though ſpecimens often occur of much inferior ſize. The trunk is always branched a flat direction, with the branches pinnated; the ſmaller ones occaſionally ſubdivided and dichotomous. The body or wood is of a horny ſubſtance and color; the bark yellow and ſmooth; the pores numerous, and projecting in the form of tubercles, diſpoſed

disposed in a double series on the margins of the branches, each being surrounded by a very bright rose-coloured or purple border. The smaller specimens are commonly pinnate; the larger ones more ramified. This elegant coral is a native of the Atlantic and of the American seas.

CAPRIMULGUS LONGIPENNIS.

Character Genericus.

Roſtrum modice incurvum, minimum, ſubulatum, baſi depreſſum.
Vibriſſæ ad os ſerie ciliari.
Rictus ampliſſimus.
Lingua acuta, integerrima.

Lin. Syſt. Nat. p. 118.

Character Specificus.

CAPRIMULGUS GRISEO-VARIUS, alis rufo fuſcoque maculatis, penna utrinque humerali denudata longiſſima.

Conari pro certo dicere quid ſibi voluerit arcanum Naturæ conſilium in anomala nonnullorum animalium conformatione, opus eſſet immenſum et omnino inexplicabile. Enormis Phoenicopteri colli crurumque longitudo, roſtrum Avocettæ flexile et recurvum, nec non Pinguinariarum alæ breves et velut ſquamatæ; hæc omnia facile ſatis referri poſſunt ad vitæ rationem quæ hiſce avibus peculiaris eſt et accommodata. Fruſtra autem torquebimur quærendo,

cuinam uſui inſerviant pennæ nudæ et prælongæ quas utrinque gerit collum Paradiſeæ auratæ; illæve quæ proveniunt a lateribus Paradiſeæ apodæ; ſeu alarum Grylli qui monſtroſus dicitur gyri et volumina; aut immodici proceſſus alarum Phalænæ macrouræ. Nec felicius inquiramus quo animo dederit Natura avi quam cernere eſt in tabula pennam longiſſimam, denudatam, quæ ab humero utroque e medio tectricum minorum exoritur, bis ſaltem ſuperans longitudinem totius avis. Extremitates ſolæ plumatæ ſunt, penna ipſa nigra leviſſime per totam longitudinem barbata; apicibus plumatis nigricantibus, ter quater cinereo tranſverſe faſciatis.

Color avis generalis obſcure cinereus, maculis atomiſque nigris, rufis, albidiſque belle guttatus. Alæ ferrugineæ faſciis confertis nigricantibus notantur, exceptis tectricibus minoribus. Vertex capitis nigrior reliquo copore. Pectus et abdomen ferrugineo-pallida ſtrias habent maculaſque plurimas nigricantes tranſverſim ductas. Collum poſticum cingit quaſi collare ferrugineum. Alæ paulo longiores cauda cinerea, faſciis atomiſque nigricantibus diſtincta. Pedes exigui; unguis intermedii latere fortiter ſerrato. Nova proculdubio eſt avis, nec antea deſcripta. A Sierra Leona delatum eſt ſpecimen quod depinximus. Magnitudo eſt quaſi Sturni vulgaris.

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THE

LEONA GOATSUCKER.

GENERIC CHARACTER.

Bill very ſmall, depreſſed at the baſe, ſlightly hooked.

Mouth extremely wide; the ſides furniſhed with a ſeries of briſtles.

SPECIFIC CHARACTER.

VARIEGATED GREY GOATSUCKER, with wings ſpotted rufous and black, with a very long naked-ſhafted feather on each ſhoulder.

In the formation of ſome animals we meet with particulars ſo inexplicable as to baffle all attempts at pointing out the purpoſes for which Nature intended them.

The immoderate length of neck and legs in the Flamingo, the recurved and flexible bill of the Avocet, the ſhort and ſcaly wings of the Penguin, are evidently calculated for the well-known manner

of life in the reſpective animals: but it would be in vain to enquire into the particular uſe of the long, ſhaft-like feathers which project from each ſide the neck of the Paradiſea aurata, or thoſe which hang from the ſides of the Paradiſea apoda: for the ſtrange and uncouth convolutions in the wings of the Gryllus monſtroſus; or the extravagant proceſſes which terminate thoſe of the Phalæna macroura. The bird which forms the ſubject of the preſent plate may alſo be adduced as an equally ſingular example of the above inexplicable formation; its principal character conſiſting in the exceſſively long naked ſhafts projecting from the upper part of each ſhoulder, in the midſt of the ſmaller coverts. Theſe remarkable feathers are at leaſt twice the length of the whole bird, and are webbed only at their extremities: the naked or ſhafted part is black, very ſlightly bearded on each ſide the whole length; and the webbed or plumed ends are duſky or blackiſh with three or four obſcure cinereous tranſverſe bars. The general color of the bird is is a blackiſh grey, elegantly variegated with ſpecks of black, rufous, and whitiſh: the wings are ferruginous, all the feathers, except the ſmaller coverts, being marked with numerous blackiſh bars: the top of the head is darker than the reſt of the bird: the under parts are pale ferruginous, daſhed with duſky bars and patches, and round the back of the neck runs a ſort of ferruginous collar or band. The wings reach beyond the tail, which is cinereous, with blackiſh bars and freckles: the feet are very ſmall, with the middle

middle claw very ſtrongly ſerrated on the interior ſide. This bird is an undoubted non-deſcript, and is a native of Sierra Leona, from whence the ſpecimen here figured was recently imported. Its ſize is that of a Starling.

proculdubio eſt coluber faſciatus inter formoſiſſimos ſui generis. Reperiri præcipue dicitur in Carolina, et in numero eſſe ſerpentum prorſus innocuorum.

THE

FASCIATED SNAKE.

Generic Character.

Tranſverſe *Lamellæ* under the abdomen.
Broad alternate *Scales* under the tail.

Specific Character, &c.

BLUE SNAKE, paler and variegated with brighter blue beneath.

The WAMPUM SNAKE.

Cateſb. Car. 2. t. 58.

It will readily be perceived by thoſe who are converſant in natural hiſtory, that the elegant ſnake repreſented on the preſent plate is in reality copied from Cateſby, with the variation only of poſture: it is commonly conſidered as the coluber faſciatus of Linnæus, and is thus quoted, though not without a mark of uncertainty, in the Syſtema Naturæ. If the colours of the living animal are really ſuch as expreſſed by Cateſby, it muſt certainly be regarded as one

THE

HAMMER-HEADED SHARK.

Generic Character.

Spiracula five on each ſide the neck.
Body oblong, ſomewhat cylindric.
Mouth ſituated beneath, in the fore part of the head.

Specific Character, &c.

SHARK with tranſverſe hammer-ſhaped head.

The ZYGÆNA.

The BALANCE-FISH.

This fiſh is readily diſtinguiſhed from all others by the ſtrange and uncouth ſhape of its head. It ſometimes grows to the length of ſix feet, and is principally ſeen in the Mediterranean.

R. A.

BULLA VIRGINEA.

Character Genericus.

Animal limax.
Teſta univalvis, convoluta, inermis.
Apertura ſubcoarctata, oblonga, longitudinalis.
Columella obliqua, lævis.

Lin: Syſt. Nat. p. 1181.

Character Specificus, &c.

BULLA ALBA, faſciis verſicoloribus duplicatis, columella truncata purpurea.

BULLA TESTA ſubturrita erecta, columella truncata ſanguinea.

Lin. Syſt. Nat. p. 1186.

BUCCINUM VIRGINEUM.

Lin. Muſ. Lud. Ulr. n. 267.

In Aſiæ fluviis præcipue reperta ſedem ſibi vindicat hæc concha inter pulcherrimas ſui generis. Colore interdum variat; notas tamen ſemper retinet certas adeo et conſtantes, ut de ſpecie non poſſit dubitari.

THE

RIBBAND BULLA.

GENERIC CHARACTER.

Animal reſembling a Limax or Slug.
Shell univalve, convoluted.
Aperture ſomewhat ſtraitened, oblong, longitudinal, entire at the baſe.
Column oblique and ſmooth.

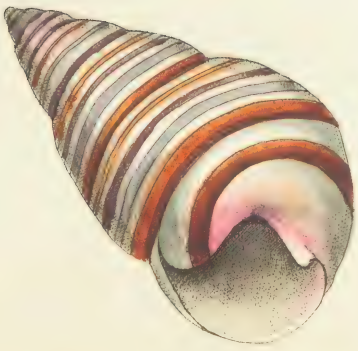
SPECIFIC CHARACTER, &c.

WHITE BULLA, with particoloured double bands, and purple truncated column.

The STRIPED BULLA.

The PAINTED BULLA.

This beautiful ſhell, which is juſtly conſidered as one of the moſt elegant of the genus, is principally found in the rivers of Aſia. It varies ſometimes in its colors, but always retains characters ſufficiently clear to determine the ſpecies.



R.N.

ALCEDO CÆRULEA.

Character Genericus.

Roſtrum trigonum, craſſum, rectum, longum.
Lingua carnoſa, breviſſima, plana, acuta.
Pedes greſſorii *pleriſque*.

Lin. Syſt. Nat. p. 178.

Character Specificus, &c.

ALCEDO CÆRULEA, ſubtus rufa, humeris uropygioque viridibus, ſuperciliis et torque albis.

ALCEDO CÆRULEA, ſubtus rufa, ſuperciliis et torque albis.

Lin. Syſt. Nat. Gmel. p. 454.

ALCEDO CÆRULEA.

Lath. ind. orn. p. 249.

ISPIDA INDICA torquata.

Briſs. 4. p. 481. t. 37. f. 2. A.

In India innaſcitur Alcedo cærulea, Alcedinem Europæam ſeu Iſpidam magnitudine ſuperans: caput

dorſumque veſtiunt pennæ cæruleæ ſplendidiſſimæ; alarum tectrices minores uropygiumque pulchre virent; pectus et abdomen rufeſcunt; roſtrum pedesque nigricant.

THE

WHITE-COLLARED KINGFISHER.

GENERIC CHARACTER.

Bill trigonal, thick, ſtrait, long, ſharp-pointed.
Tongue fleſhy, very ſhort, flat, ſharp-pointed.
Feet (in moſt ſpecies) greſſorial.

SPECIFIC CHARACTER, &c.

BLUE KINGFISHER, rufous beneath, with green ſhoulders and rump, a white collar round the neck, and a white ſtreak over the eyes.

WHITE-COLLARED KINGFISHER.
Lath. ſyn. p. 620.

The white-collared Kingfiſher is a native of India: in ſize it exceeds the common or European Kingfiſher: the head and back are of a rich and beautiful blue: the ſhoulder-feathers or ſmaller wing-coverts and the rump of a bright green: the breaſt and abdomen rufous; the bill and feet duſky.

NAIS SERPENTINA.

Character Genericus.

Corpus repens, longum, lineare, pellucidum, depreſſum.
Pedunculi ſetis ſimplicibus.
Tentacula nulla.
Oculi duo aut nulli.

Lin. Syſt. Nat. Gmel. p. 3120.

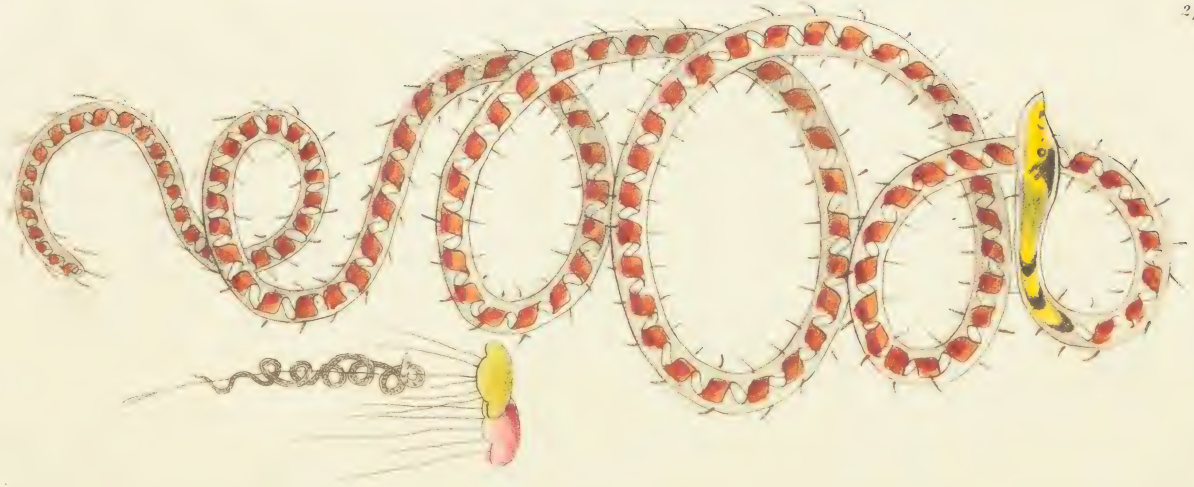
Character Specificus, &c.

NAIS PELLUCIDA, inteſtino ſpirali rubro, collari triplici nigro.

NAIS SERPENTINA.

Lin. Syſt. Nat. Gmel. p. 3121.
Roeſ. inſ. 3. p. 567. t. 92.

Spargit ſe genus *Nais* in parva animalia, aquas plerumque dulces amantia. Horum nonnullæ ſpecies, qualis eſt ea quam depinximus, examinari ſatis accurate nequeunt ſine microſcopio. Depingitur hæc ſpecies, quam frequentem alunt aquæ ſtagnantes, tum ſua magnitudine, tum microſcopice aucta.



R.V

THE

SERPENTIFORM NAIS.

Generic Character.

Body repent, long, linear, pellucid, depreſſed.
Briſtles on each ſide, inſtead of feet.
Tentacula none.

Specific Character, &c.

PELLUCID SNAKE-LIKE NAIS, with red ſpiral inteſtine and triple black collar.

The COLLARED WATER-WORM.

The SNAKE NAIS.

The genus Nais conſiſts of ſmall animals, which in general are natives of freſh waters: ſome ſpecies are not to be diſtinctly examined without the aſſiſtance of glaſſes: amongſt theſe is the animal here repreſented, both in its natural ſize, and as it appears when magnified: it is not uncommon in ſtagnant waters.

PAPILIO HECTOR.

Character Genericus.

Antennæ apicem verſus craſſiores, ſæpius clavato-capitatæ.

Alæ (ſedendis) erectæ ſurſumque conniventes. (Volatu diurno.)

Lin. Syſt. Nat. p. 744.

Character Specificus, &c.

PAPILIO alis caudatis concoloribus nigris; primoribus faſcia interrupta alba; poſticis maculis lunatis coccineis.

PAPILIO alis caudatis concoloribus nigris: primoribus faſcia alba; poſticis maculis rubris.

Lin. Syſt. Nat. p. 745.

PAPILIO HECTOR.

Lin. Fabr. Cram. Gmel. &c. &c. &c.

Inter lautiſſimos papiliones exoticos habetur papilio Hector quem alit India. Tabula eum exhibet magnitudine naturali.

HECTOR.

Generic Character.

Antennæ thickening towards the upper part, and generally terminating in a knob.
Wings (when ſitting) erect. (Flight diurnal.)

Specific Character, &c.

BLACK BUTTERFLY with tailed wings: the upper pair marked by a broken white band; the lower by numerous creſcent-ſhaped crimſon ſpots.

The crimſon-ſpotted INDIAN BUTTERFLY.

This inſect is one of the fineſt of the exotic butterflies, and is a native of India: the plate repreſents it in its natural ſize.

ALCYONIUM ARENOSUM.

Character Genericus.

Animal (plerumque) plantæ forma creſcens.
Stirps fixa, carnoſa, gelatinoſa, ſpongioſa, vel coriacea, *oſculis polypiferis* obſita.

Character Specificus, &c.

ALCYONIUM ſimplex ſemicirculare arenoſo-lutoſum.

ESCHARA LUTOSA.
Pall. el Zooph. p. 37. n. 5.

Eſchara MILLEPORA arenoſa Anglica.
Raii ſyn. p. 31.

FLUSTRA ARENOSA.
Lin. Syſt. Nat. Gmel. p. 3829.

FLUSTRA ARENOSA.
Soland. et Ell. Zooph. p. 17

Miram hanc ſubſtantiam, quam in *Eſcharis* numeravit Pallas, in *Milleporis* Elliſius? in *Fluſtris* Gmelinus, qui ſyſtema naturæ Linnæanum auctius edidit, nullus

nullus dubito in *Alcyonii* genere reponere. Adhæret plerumque radicibus fucorum majorum; circa littora Britanniæ ſeptentrionalis minime rara; ſemper retinens figuram ſemicircularem. Subſtantia eſt multo leviori et magis friabili quam cætera pleraque Alcyonia, et conſtare videtur ex arena glutine animali connexa. Cellulæ polypos recipientes qui putantur maſſam ædificaſſe, majuſculæ ſunt, nec profundæ, ſed potius ſuperficiariæ. Color totius leviter fuſco-flavet. Oſtendit tabula veram magnitudinem.

f

SANDY ALCYONIUM.

Generic Character.

Animal (commonly) growing in the form of a plant.

Subſtance more or leſs fleſhy, gelatinous, ſpongy, or coriaceous: beſet with polype-cells.

Specific Character.

Flat ſandy ALCYONIUM of a ſemi-circular form.

Horſe-ſhoe MILLEPORE.

Engliſh ſandy MILLEPORA.

Ellis corallin. p. 74.

I have not the ſlighteſt heſitation in ranking this curious ſubſtance under the genus Alcyonium, rather than that of Eſchara, in which it is placed by Pallas, of Millepora, in which it is ſtationed by Ellis? or laſtly, in that of Fluſtra, in which it is arranged by Gmelin in his enlarged edition of the Syſtema Naturæ of Linnæus. It is repreſented in its natural ſize, and is generally found attached to the roots of the

the larger fuci: it is not uncommon about the northern parts of the Britiſh coaſts, and always preſerves its ſemicircular ſhape. Its texture is much ſlighter than that of moſt others of this genus, ſeeming to conſiſt of ſandy particles connected by an animal gluten: the cells or cavities, in which are ſuppoſed to reſide the polypes, or fabricators of the maſs, are rather large than ſmall, and are not very deeply impreſſed, but rather ſuperficial. Its colour is a pale yellowiſh brown.

CORACIAS INDICA.

Character Genericus.

Roſtrum cultratum apice incurvato, baſi pennis denudatum.
Lingua cartilaginea, bifida.
Pedes ambulatorii.

Lin. Syſt. Nat. p. 159.

Character Specificus, &c.

CORACIAS ex cyaneo et cæruleo-thalaſſino varia, dorſo teſtaceo, pileo vireſcente.

CORACIAS CÆRULEA, antice teſtacea, pileo viridi.

Lin. Syſt. Nat. p. 159.

CORACIAS INDICA.

Lath. ind. orn. p. 170.

Licet ſuperbiat totum genus ſplendidiſſimis coloribus, ægre tamen ſpeciem pulchriorem reperies quam quæ in tabula depingitur. In Muſeo Britannico aſſervatur ſpecimen unde delineata eſt hæc noſtra figura, magnitudine quaſi Coraciæ communis ſive Europææ.

THE

INDIAN ROLLER.

GENERIC CHARACTER.

Bill ſtrait, bending a little towards the end; cultrated at the edges.

Noſtrils narrow; naked.

Legs generally ſhort: toes divided to their origin; three forwards and one backwards.

SPECIFIC CHARACTER, &c.

ROLLER varied with deep-blue and pale greeniſh-blue; the back pale-brown; the top of the head greeniſh.

The CEYLONESE ROLLER.

The INDIAN ROLLER.

Lath. ſyn. p. 412.

BLUE JAY from the Eaſt Indies.

Edw. pl. 326.

The genus Coracias is eminently diſtinguiſhed by beauty of color, and the ſpecies here repreſented may be conſidered as one of the moſt brilliant. The ſpecimen from which the figure was taken is in the Britiſh Muſeum, and is about the ſize of the common or European Roller.

STYLEPHORUS CHORDATUS.

Character Genericus.

Oculi pedunculati (ſeu cylindro craſſo brevi impoſiti.)

Roſtrum productum, ſurſum ſpectans, verſus caput membrana interjecta retractile.

Os terminale, edentulum?

Branchiæ trium parium ſub jugulō ſitæ.

Pinnæ pectorales parvæ; *dorſalis* longitudine dorſi, caudalis brevis, radiato-ſpinoſa.

Corpus longiſſimum, compreſſum.

Cum rariſſimum hunc piſcem in primo volumine Actorum Societatis Linnæanæ jam deſcripſerim, ſatis erit lectores admonere fideliter in tabula depingi naturalem animalis magnitudinem, coloremque (exceptis capite pinniſque fuſcis) eſſe ſplendide argenteum.

Captus fuit Stylephorus chordatus juxta parvulas aliquot inſulas non longe a Cuba diſtantes. Specimen, quod unicum in Europa extare creditur, undeque exaravi deſcriptionem quæ actis inſeritur Societatis Linnæanæ, conſpici poſſit in Muſeo Leveriano.

Novum genus conſtituit piſcis, cujus alia nulla hactenus cognita eſt ſpecies.

THE

CHORDATED STYLEPHORUS.

Generic Character.

Eyes pedunculated; ſtanding on a ſhort, thick cylinder.

Snout lengthened; directed upwards; retractile towards the head by means of a membrane.

Mouth without teeth?

Branchiæ three pair, beneath the throat.

Fins pectoral ſmall; *dorſal* the length of the back; *caudal* ſhort, with ſpiny rays.

Body very long; compreſſed.

Having already deſcribed this highly curious animal in the firſt Volume of the Tranſactions of the Linnæan Society, I ſhall at preſent only obſerve that it is here repreſented in its natural ſize; that the color (except on the head and fins, which are brown) is a bright ſilver; and that it was taken near a cluſter of ſmall iſlands not far from the coaſt of Cuba. The only ſpecimen yet known in Europe, and from which the deſcription above referred to in the Linnæan Tranſactions was drawn up, is preſerved in the Leverian Muſeum.

I need not add that this fiſh conſtitutes a new genus, of which no other ſpecies has yet been diſcovered.

CHÆTODON SQUAMULOSUS.

Character Genericus.

Dentes (pleriſque) ſetacei, flexiles, confertiſſimi, numeroſiſſimi.

Membrana branchioſtega radiis ſex.

Corpus plerumque faſciatum. Pinna dorſi anique carnoſa ſquamoſa.

Character Specificus, &c.

CHÆTODON viridi-aureus, ſquamis ſquamuloſis.

ACARAUNA MAJOR, &c.

Cateſb. 2. p. 31. t. 31.

Piſcem depinximus non modica pulchritudine, juxta Americæ et inſularum adjacentium litora copioſe ſatis generatum, ſquamis inſigniter contectum quæ ipſæ minutius ſquamatæ: quod vel ſolum ſpeciem ſatis denotet. Non raro errant auctores, qui nihil diſtare opinantur hunc piſcem a *Chætodonte trioſtego* Linnæi; ducitque eos in errorem quod falſo citatur in ſyſtematis Linnæani editione duodecima, indeque in alia multa opera irrepſit.

Accidere

Accidere ſolet huic quod et aliis pleriſque piſcibus, ut diverſis anni temporibus variet color; magis ſcilicet minuſve aureus, pinnis itidem magis minuſve rubro-cæruleis.

THE

DOUBLE-SCALED CHÆTODON.

Generic Character.

Teeth (in moſt ſpecies) ſetaceous, ſmall, very numerous.

Body commonly faſciated tranſverſely. Dorſal and anal fins fleſhy and ſcaly towards the baſe.

Specific Character, &c.

Gold-green CHÆTODON, with the ſcales coated with ſmaller ones.

The ANGEL-FISH.

This beautiful fiſh is not uncommon about the coaſts of America and the Weſt Indian iſlands. It is remarkable for the very ſingular appearance of its ſcales; which are each coated over with much ſmaller ones; a particularity alone ſufficient to diſtinguiſh this ſpecies from almoſt all others. It is often confounded with the Chætodon trioſtegus of Linnæus; owing to a miſtaken quotation in the twelfth

twelfth edition of the Syſtema Naturæ of that author, and which has been careleſsly repeated by ſeveral others. In color, like moſt fiſhes, it varies at different ſeaſons; being ſometimes of a far richer and more golden tinge than at others; as well as with the blue and ſcarlet of the fins either deeper or lighter according to circumſtances.

TRICHECHUS ROSMARUS.

Character Genericus.

Dentes Primores nulli utrinque.
Laniarii ſuperiores ſolitarii.
Molares ex oſſe rugoſo utrinque; inferius duo.
Labia geminata.
Pedes poſteriores compedes coadunati in pinnam.

Lin. Syſt. Nat. p. 49.

Character Specificus, &c.

TRICHECHUS dentibus laniariis ſuperioribus exſertis.

Lin. Syſt. Nat. p. 49.

TRICHECHUS dentibus laniariis ſuperioribus exſertis remotis.

Lin. Syſt. Nat. Gmel. p. 59.

ROSMARUS.

Jonſt. piſc. t. 44.

EQUUS MARINUS ſ. Hippopotamus falſo dictus.

Raj. quadr. 191.

THE

ARCTIC WALRUS.

Generic Character.

Tuſks in the upper jaw, large, and pointing downwards.
Grinders four on both ſides, above and below.
Cutting teeth none.
Feet palmated.

Specific Character, &c.

WALRUS with long tuſks remote from each other.

The ARCTIC WALRUS.

*Penn*t. *Quadr.* 2. *p.* 266.
Arctic Zoology. n. 71. *p.* 144.

The Morſe, Sea-Horſe, or WALRUS.

The Walrus is one of thoſe animals which in general ſhape and appearance make a near approach to the Seal or ſea-calf, and in a natural arrangement of quadrupeds muſt of neceſſity be diſpoſed in the ſame tribe. The color of this animal is a darkiſh brown:

brown: the body is thinly ſcattered with hair, and the ſkin is thick and wrinkled. The ſhape of the Walrus is extremely uncouth; it is very thick in the middle, and gradually leſſens towards the tail, which is very ſhort: the head is remarkably ſhort and round; the lips very thick, and the vibriſſæ or whiſkers conſiſt of tranſparent briſtles as thick as ſtraws. In the upper jaw are two very long, large, acuminated tuſks, pointing downwards. The Walrus grows to the length of ſeveral feet, and has ſometimes been found not far ſhort of twenty feet in length.

Of animals whoſe habitations and retreats are ſo far removed from the general haunts of mankind, we muſt not expect to obtain that exact knowledge with reſpect to their ways of life which creatures of a more acceſſible nature permit us to diſcover. Innumerable ſtratagems, ſays an elegant writer, are acted in the gloomy wilderneſs and in the great deep, which muſt for ever elude human inveſtigation. All that is known of the general habits of the Walrus is derived from the accounts of navigators and others who have obſerved them during their temporary abodes either on the floating iſlands of ice in the northern ocean, or on the frozen coaſts of the arctic regions. They are gregarious animals, and ſometimes aſſemble in multitudes on the coaſts to ſleep. They are of a very pugnacious diſpoſition, and with their enormous teeth inflict the moſt grievous wounds on each other during their conteſts. Their voice is a loud roar. They are poſ-

ſeſſed

ſeſſed of great courage, and reſiſt with dreadful violence the attacks of mankind. They are killed in the northern regions for the ſake of their oil, which is extremely plentiful: their teeth are alſo conſidered as a valuable article of commerce, being in ſtrength at leaſt equal, if not ſuperior to ivory; their color however is not ſo laſting.

CUCULUS SINENSIS.

Character Genericus.

Roſtrum teretiuſculum.
Nares margine prominulæ.
Lingua ſagittata, plana, integra.
Pedes ſcanſorii.

Lin. Syſt. Nat. p. 168.

Character Specificus, &c.

CUCULUS macrourus cæruleus, ſubtus niveus, caudæ tectricibus rectricibuſque macula nivea notatis.

CUCULUS cauda cuneiformi macroura, corpore cæruleo ſubtus albo, rectricum apicibus macula alba.

Lin. Syſt. Nat. p. 171.

CUCULUS ſinenſis cæruleus.

Briſſ. av. 4. p. 157. t. 14.

Ab erudito Briſſono mutuatus ſum hanc deſcriptionem, qua nulla poſſit eſſe plenior et accuratior.

" Speciem iſtam nondum mihi videre contigit. Ipſius deſcriptionem deſumpſi ab icone in Sina ad

vivum depicta a D. Poivre; et ſic eam æri inſculptam eſſe curavi.

Merulam craſſitie circiter æquat. Ipſius longitudo ab apice roſtri ad caudam extremam tredecim circiter pollices explet, et ad extremos ungues ſeptem pollices et novem lineas. Roſtrum ab ipſius apice ad oris angulos uſque undecim lineas longum eſt; cauda ſeptem pollices et ſex lineas; pes decem cum ſemi lineas; digitorum anticorum extimus cum ungue undecim lineas, intimus novem lineas; poſticorum exterior decem lineas, interior quinque cum ſemi lineas. Alæ complicatæ ultra caudæ exortum non multum protenduntur. Summum caput albore nitet, minutiſque variegatur maculis cæruleis. Totum reliquum caput et guttur nigricant: color autem nigricans ſuper inferiorem colli partem in acumen protenditur. In utroque capitis latere macula exſtat rotunda candida, pone oculum poſita. Pars colli ſuperior, dorſum, pennæ ſcapulares et ſuperiores alarum tectrices ſplendidiſſimi cærulei ſunt coloris, exceptis tamen ſuperioribus alarum tectricibus majoribus a corpore remotioribus albis. Uropygium dilutiſſimo tingitur cæruleo. Superiores caudæ tectrices eodem imbuuntur cæruleo ac dorſum ipſum tingitur, et ex iſtis quælibet majuſcula macula ovata nivea verſus apicem inſignitur. Collum inferius et ad latera, pectus, venter, latera, crura, inferioreſque caudæ tectrices niveo candore nitent. Alarum remiges majores ſunt ab ipſarum exortu mediam verſus longitudinem uſque dilutiſſime cæruleæ, a medietate ad apicem eodem ac dorſum cæruleo imbutæ: minores quoque dorſo concolores. Caudam

dam componunt decem rectrices ſplendidiſſime cæruleæ, majuſcula macula ovata nivea verſus ipſarum apicem notatæ. Binæ intermediæ utrinque proxime ſequentem trium pollicum et totidem linearum longitudine excedunt: laterales vero gradatim longitudine minuuntur ad utrinque extimam uſque unum pollicem et novem tantum lineas longam. Oculorum irides rubræ. Mandibulæ ſuperioris baſis quibuſdam obſita eſt plumulis rigidis, piliformibus, antrorſum verſis. Roſtrum, pedes, ungueſque rubent. Habitat in Sina."

THE CHINESE CUCKOW.

Generic Character.

Bill ſomewhat bending.
Noſtrils bounded by a ſmall rim.
Tongue ſhort, pointed.
Feet ſcanſorial.

Specific Character, &c.

Long-tailed blue CUCKOW, white beneath; the tail-feathers and their coverts each marked with a white ſpot.

Le COCOU bleu de la Chine.

Briſſ. 4. p. 157.

SAN-HIA de la Chine.

Buf. ois. 6. p. 389.

The Chineſe Cuckow is thus deſcribed with elaborate exactneſs by the celebrated ornithologiſt Briſſon.

" Not having ſeen the bird myſelf, I have given its deſcription from a drawing taken from the life in China by Monſ. Poivre. It is about the ſize of a black-

a blackbird: its length, from the tip of the bill to the end of the tail, is about thirteen inches; and to the end of the claws about ſeven inches and nine lines. The bill, from the tip to the corners of the mouth, eleven lines: the tail ſeven inches and ſix lines: the foot ten lines and a half: the exterior fore-toe, with the claw, eleven lines; the interior nine lines; the exterior hind-toe ten lines; the interior five lines and a half. The wings, when cloſed, do not reach much beyond the beginning of the tail. The top of the head is of a clear white, variegated with minute ſpecks of blue: all the reſt of the head, with the throat, is blackiſh: the blackneſs being produced on the lower part of the neck into a ſharpened form. On each ſide the head is a round white ſpot, placed behind the eye. The upper part of the neck, the back, the ſcapular feathers, and the upper wing-coverts are of a moſt brilliant blue, except the larger upper wing-coverts fartheſt from the body, which are white: the rump is of a very pale blue: the upper tail-coverts are of the ſame blue color with the back, and are each marked with a rather large, ſnow-white ſpot towards the end: the lower part and ſides of the neck, the breaſt, belly, ſides of the body, thighs, and lower tail-coverts are of a beautiful ſnow-white. The larger wing-feathers are of a very pale blue from their origins to their middles; and from their middles to their tips of the ſame blue with the back: the ſmaller wing-feathers are alſo of the ſame color with the back. The tail is compoſed of ten feathers of a very bright blue, each marked towards the tip with a largiſh ſnow-white ſpot: the two middle

feather

feathers exceed in length the two next them on each ſide by three inches and as many lines; but the ſide-feathers ſhorten gradually to the exterior one on each ſide, which is only one inch and nine lines in length. The irides of the eyes are red: the baſe of the upper mandible is beſet with ſome ſmall, ſtiff, hair-like feathers, turned forwards. The beak, feet, and claws are red. It is a native of China."

VORTICELLA POLYPINA.

Character Genericus.

Corpus contractile nudum, ciliis rotatoriis.

Lin. Syſt. Nat. Gmel. p. 3874.

Character Specificus, &c.

VORTICELLA compoſita ovato-truncata, pedunculo reflexili ramoſiſſimo.

Müll. an. inf. p. 328. *t.* 46. *f.* 7—9.

VORTICELLA compoſita, floribus concatenatis, ſtirpe paniculata ſubdigitata.

Lin. Syſt. Nat. p. 1317.

BRACHIONUS vegetans, ſtirpe retortili umbellata, radiis racemoſis, corpuſculis campanulatis.

Pall. Zooph. 56.

VORTICELLA polypina.

Müll. hiſt. verm. 1. p. 123. *n.* 137.

Mirari jure poſſint in operibus naturæ minutioribus parum verſati, non inter vegetabilia referri quod in tabula proponitur, ſed inter animalia. In fere innumeris aquarum incolis quos ope microſcopii detexerunt hodierni phyſici, pulchriores pauci ſunt, aut digniores qui penitius examinentur, quam

quos

quos continet *Vorticellarum* genus: quod modo vivendi, et prolem propagandi, polypis ſeu hydris admodum eſt affine: adeo ut a multis microſcopicis ſcriptoribus nomine vocatum ſit *polypi racemati*. Sunt enim variæ ſpecies quæ fere unitæ et connexæ videntur, plurimis confertis et parvo ſpatio coarctatis; ſunt etiam quæ creſcunt et panduntur veluti in racemi ſimilitudinem.

Reperiuntur, ut plurimum, Vorticellæ menſibus æſtivis, in aquis purioribus ſtagnantibus, adhærentes caulibus foliiſque plantarum minorum; præcipue autem lemnæ vulgaris. Quam vero jam deſcribimus marina eſt ſpecies, quæ ſimili modo creſcit ſuper fucis minoribus. Tota congeries nudo oculo conſpecta videtur quaſi macula quædam albicans, viſcido-mucoſa: nec patet ejus forma mira et peculiaris, donec in aquæ guttula immerſa vitroque impoſita examen microſcopii ſubierit. Ab unico caule prodeunt incertis intervallis ramuli minores, ſingulo quaſi in florem pulcherrimum deſinente convolvulo non abſimilem, lateraque habentem adverſa filamentis duobus inſtructa, more ſtaminum. Habet omnis coacervatio pelluciditatem vitri puriſſimi; floreſque animati nunc ſe contrahentes, nunc dilatantes, motu quaquaverſum variato, adeo delectant oculos, ut vix aliud magis quod ope microſcopii ſpectatur. Singulum animalculum, licet ſtipes omnibus in commune ſit, integrum tamen eſt et ſui juris; cumque plene adoleverit, poſſit ſe a patrio solo diſſociare, et novam coloniam alio deducere.

Prædantur Vorticellæ animalcula ſe minora, quæ prope natantia arripiunt ingurgitantque, ſimul atque in vorticem contorſerint aquas gyratis tentaculis.

THE

ARBORESCENT VORTICELLA.

GENERIC CHARACTER.

Body contractile, naked; furniſhed with rotatory organs.

SPECIFIC CHARACTER, &c.

Compound bell-ſhaped VORTICELLA, with retortile branched ſtem.

Paniculated ſea VORTICELLA.

Tree or Arboreſcent VORTICELLA.

To thoſe who are not particularly converſant in the hiſtory of the minuter productions of Nature it muſt doubtleſs be matter of ſurpriſe to be informed that the figures on the annexed plate are not the repreſentations of a vegetable but of an animal.

Amongſt the innumerable inhabitants of the waters, which the microſcope has enabled modern naturaliſts to diſcover, few are more ſtrikingly curious than thoſe which conſtitute the genus *Vorticella*. Theſe animals, in their general mode of life, their manner of production, and other circumſtances, bear a great affinity to the Hydræ or Polypes; and indeed by many microſcopical writers have been called by the

the title of Cluſter-Polypes; many of the ſpecies being found in groupes; ſometimes formed by the mere approximation of ſeveral individuals; and at other times by the ramified or aggregate manner in which they grow.

The Vorticellæ are generally found in clear ſtagnant waters, during the ſummer months; attached to the ſtalks of the ſmaller water-plants; and particularly to thoſe of the common Lemna or duck-weed. The ſpecies however here repreſented is a marine one, and is attached in a ſimilar manner to the ſtalks of the ſmaller Fuci. To the naked eye the whole groupe bears the appearance of a very ſmall whitiſh ſpot or ſlime, reſembling mouldineſs; but when placed in a drop of water on a glaſs, and examined by the microſcope, its extraordinary ſtructure is immediately diſplayed. From a ſingle ſtem proceed, at various heights, ſmaller ramifications, each terminated by a ſeeming flower, like that of Convolvulus, and furniſhed on the oppoſite edges with a pair of filaments reſembling ſtamina. The whole is in the higheſt degree tranſparent, and perfectly reſembles the fineſt glaſs; while the varying motions of the ſeeming flowers, expanding and contracting occaſionally, and turning themſelves in different directions, afford a ſcene ſo ſingularly curious that it may be numbered amongſt the moſt pleaſing ſpectacles which the microſcope is capable of exhibiting. Each animal, though ſeated on the common ſtem, is to be conſidered as complete in itſelf, and poſſeſſes the power, when fully grown, of detaching itſelf from the parent ſtem, affixing

itſelf

itſelf in ſome other ſpot, and forming a new colony. The Vorticellæ feed on animalcules ſtill ſmaller than themſelves; and their various motions are commonly exerted in order to obtain their prey, the rotatory motion of their tentacula cauſing an eddy in the neighbourhood of each individual ſufficient to attract into its vortex the animalcules which happen to ſwim near, and which the Vorticellæ ſeize, by ſuddenly contracting, and incloſing them.

LACERTA PALUSTRIS.

Character Genericus.

Corpus tetrapodum, caudatum, nudum.
Lin. Syſt. Nat. p. 359.

Character Specificus, &c.

LACERTA nigricans, lateribus albido-punctatis, abdomine croceo, maculis inæqualibus nigris.

SALAMANDRA alepidota verrucoſa.
Gronov. Muſ. 2. p. 77. *n.* 51.

SALAMANDRA aquatica.
Houttuyn. Act. Ulyſſ. 9. p. 328.

Triton PALUSTRIS.
Laur. amph. p. 39. *n.* 43. *t.* 4. *f.* 2.

Superat interdum magnitudine Lacerta paluſtris ſpecimina quæ in tabula oſtenduntur; rarior et amplior lacerta aquatica, quam alunt fere omnes aquæ ſtagnantes. Color corporis ſuperioris fuſco-nigricat ſaturatior; infra aurantius, maculis magnis, inæqualibus, nigris, variatus. Latera verruculis plurimis ſeu atomis convexis, albis, aſperguntur; caudaque utrinque faſciam plerumque habet latam, ſubargenteam,

team, cum miſtura quadam ſubcærulei. Aſſurgit magis minuſve per dorſum maris quaſi criſta continuata et compreſſa inæqualiter ſerrata.

Amat ut plurimum, hæc ſpecies aquas puriores et frigidiores quam quas incolit lacerta aquatica; et ineunte vere, conſpici poſſit veſpertino tempore in locis udis juxta margines aquarum, nec non ſub ſepibus, aliiſque latibulis, quæ umbram præbent et humorem.

THE

WARTED NEWT.

Generic Character.

Body four-footed, tailed; naked; or unfurniſhed with any diſtinct integument.

Specific Character, &c.

Blackiſh NEWT with the ſides ſpeckled with white; the abdomen orange with irregular black ſpots.

The Warty LIZARD.
Pennt. Brit. Zool. 3. p. 22. *t.* 3. *fig.* 1.

The black-and-orange WATER-NEWT.

The greater WATER-NEWT.

The Lacerta paluſtris is a ſpecies ſomewhat leſs common than the lacerta aquatica, which occurs in almoſt every ſtagnant water: it is alſo of a ſuperior ſize; being ſometimes found conſiderably larger than the ſpecimens here repreſented. Its color is an extremely deep blackiſh brown above, and a bright orange beneath, variegated with large irregular black ſpots. The ſides of the body are ſprinkled over

over with numerous white convex ſpecks or tubercles, and on each ſide of the tail there is commonly a broad ſtreak of a ſilvery hue, with a caſt of blueiſh. The back of the male is more or leſs diſtinguiſhed by a kind of flattened proceſs, divided into irregular ſerratures. This ſpecies is commonly met with in waters of a clearer and colder nature than thoſe in which the lacerta aquatica is found; and in the beginning of ſpring may occaſionally be obſerved, towards the evening, in damp ſituations near the margins of ponds, as well as under hedges, and other ſhady ſituations.

CERAMBYX GIGANTEUS.

Character Genericus.

Antennæ ſetaceæ.
Palpi quatuor.
Thorax ſpinoſus aut gibbus.
Elytra linearia.

Lin. Syſt. Nat. Gmel. p. 1814.

Character Specificus, &c.

CERAMBYX thorace utrinque tridentato, corpore nigro, elytris ferrugineis, antennis brevibus.
Lin. Syſt. Nat. Gmel. p. 1816.

PRIONUS giganteus.
Fab. ſpec. inſ. 1. p. 206.

Depingitur Cerambyx giganteus magnitudine naturali. Americam auſtralem inhabitat, phyſiciſque Europæis paucis abhinc annis innotuit. A Domino Drury in elegantiſſimo opere de inſectis exoticis eximie exprimitur, nec non a Domino Daubenton in opere cui titulus *Planches Enluminées*. Color eſt obſcure caſtaneus, ſeu terreo-fuſcus, thorace paulum nigriore. Elytra, ſeu alarum thecæ exteriores, quodammodo ſcabra ſunt: antennæ breviſſimæ.

THE

GREAT CERAMBYX.

Generic Character.

Antennæ ſetaceous.
Thorax either ſpinoſe or gibboſe.
Palpi four.
Wing-Caſes long or linear.

Specific Character, &c.

Black CERAMBYX, with ferruginous wing-caſes, ſhort antennæ, and thorax tridentated on each ſide.

Le THUSTE de Cayenne.

Pl. Enl. 64. *f.* 2.

The great ſhort-horned CERAMBYX.

The Cerambyx giganteus, repreſented in its natural ſize on the annexed plate, is a native of South America, and was introduced to the notice of European naturaliſts ſome few years backwards. It has been extremely well figured by Mr. Drury, in his elegant work on exotic inſects; as alſo by Monſ. Daubenton in his Planches Enluminées. Its color is a uniform dull cheſnut, or earthy brown: the thorax is ſomewhat darker or blacker than the other parts: the elytra or wing-caſes are of a roughiſh ſurface, and the antennæ are remarkably ſhort.

CERTHIA CYANEA.

Character Genericus.

Roſtrum arcuatum, tenue, ſubtrigonum, acutum.
Lingua acuta.
Pedes ambulatorii.

Lin. Syſt. Nat. p. 184.

Character Specificus, &c.

CERTHIA CYANEA, vertice beryllino, alis caudaque nigris, tectricibus inferioribus flavis.

CERTHIA cærulea, faſcia oculari humeris alis caudaque nigris, pedibus rubris.

Lin. Syſt. Nat. p. 188.

CERTHIA cærulea, faſcia oculari, humeris, alis caudaque nigris, pedibus fuſcis.

Lin. Syſt. Nat. Gmel. p. 483.

Certhiæ familiari æqualis prope eſt magnitudine avis quam repræſentat tabula. Generatur in America Auſtrali, in Cayana autem præcipue.

THE

CYANEAN CREEPER.

Generic Character.

Bill ſlender, incurvated, ſharp-pointed.
Tongue differing in ſhape in the different ſpecies.
Legs moderately ſtout.
Toes three before; one behind: back-toe large; claws hooked and long.

Specific Character, &c.

Blue CREEPER, with the wings and tail black; the crown beryl-coloured; the under wing-coverts yellow.

GUIT-GUIT noir et bleu.

Buff. ois. 5. p. 529.

GRIMPEREAU du Breſil.

Pl. Enl. 83. *f.* 2.

Black-and-blue CREEPER.

Edw. pl. 264. *f.* 1.

The bird repreſented on the plate is an inhabitant of South America, and is principally found in the province of Cayenne. Its ſize is nearly that of the common Engliſh Creeper.

CANCER BRACHIATUS.

Character Genericus.

Pedes octo (rarius ſex aut decem); inſuper manus duæ chelatæ.
Palpi ſex inæquales.
Oculi duo diſtantes, plurimis pedunculati; elongati, mobiles.
Mandibula cornea, craſſa.
Labium triplex.
Cauda articulata, inermis.

Lin. Syſt. Nat. Gmel. p. 2963.

Character Specificus, &c.

CANCER elongatus, thorace ſtriato, brachiis longiſſimis.

CANCER thorace rugoſo, antice ciliato ſpinoſo, roſtro tridente, manibus filiformibus.

Fab. ſp. inſ. 1. p. 508.

CANCER rugoſus.

Lin. Syſt. Nat. Gmel. p. 2985.

In variis Europæ Arcticæ oris conſpici poſſit hæc cancri ſpecies, ob enormem crurum anticorum longitudinem

gitudinem notabilis, nec non ob ſummam thoracis ſuperioris elegantiam; qui laminis decoratur plurimis tranſverſis, quaſi imbricatim diſpoſitis, et ſubtiliter ſerratis, ipſis quoque marginibus belle ciliatis.

THE

BAMFFIAN LOBSTER.

Generic Character.

Legs generally eight (in ſome ſpecies ſix or ten).
Feelers ſix, unequal.
Eyes two, generally diſtant, footſtalked, moveable.
Tail articulated, unarmed.

Specific Character, &c.

Long-bodied CRAB, with ſtriated thorax and very long arms.

The BAMFFIAN CRAB.

Long-clawed LOBSTER.

Pennt. Brit. Zool. 4. p. 14. *pl.* 13. *n.* 25.

This curious ſpecies is diſtinguiſhed by the enormous length of its arms, as well as by the ſingular elegance of the upper part of the thorax, which is ornamented with a great many tranſverſe, finely-ſerrated laminæ, diſpoſed over each other in an imbricated manner, and beautifully ciliated on the margins. It is found on ſeveral of the Northern coaſts of Europe.

SERPULA VERMICULARIS.

Character Genericus.

Animal Terebella.

Teſta univalvis, tubuloſa, adhærens, (ſæpe iſthmis integris paſſim intercepta.)

Lin. Syſt. Nat. p. 1264.

Character Specificus, &c.

SERPULA teſta tereti, ſubulata, curvata, rugoſa.

Lin. Syſt. Nat. p. 1267.

TUBUS VERMICULARIS.

Ellis Corall. t. 38. *f.* 2.

Specierum quas plurimas continet genus Serpula varium omnino et inæquale, diverſa admodum eſt forma et magnitudo. Species quam magnitudine naturali depinximus, in litoribus Britannicis aliiſque Europæis ſæpe conſpicitur, quaſi in longitudinem agglutinata conchis majoribus, rupibus, lapidibus, reliquiſque ejuſmodi. Pulcherrima ſunt tentacula quaſi plumata, eodem colore quo corpus, ſcilicet vivide rubra; quæque, cum animal eſcam quæritat, inſecta nempe parvula marina aliaque id generis, exſeruntur;

ferunturſ; et aſſurgit inter tentacula tuba, margine ampliore, tubæ bellicæ non longe abſimilis, quam juxta eſt et alia ſimplicior. Corpus reliquum intra teſtam contrahitur, et ad ſimilitudinem hirudinis quodammodo accedit.

THE

VERMICULAR SERPULA.

Generic Character.

Animal reſembling a Terebella.

Shell univalve, tubular, adhering commonly to other ſubſtances, (in ſome ſpecies intercepted internally by diſſepiments at uncertain diſtances.)

Specific Character, &c.

SERPULA with round, tapering, curved, wrinkled ſhell.

VERMICULAR SERPULA.

Common SERPULA or Worm-ſhell.

The genus Serpula, conſiſting of a great number of ſpecies of very different ſizes and forms, is among the leaſt regular of the teſtaceous tribe; and the inhabiting animals appear of a very different caſt from thoſe of any other ſhells. The ſpecies here figured in its natural ſize, is not uncommon on the Britiſh and other European coaſts. It is found attached, or agglutinated as it were, longitudinally, to the larger ſhells,

ſhells, rocks, ſtones, or other ſubſtances. The animal is remarkable for the elegance of its plumy tentacula, which, as well as the body, are of a bright ſcarlet color, and are protruded when the creature is in queſt of prey; viz. the ſmaller ſea inſects, &c. Between the tentacula ariſes a curious tube with a dilated opening not ill reſembling the form of a trumpet; and near this appears another tube of a more ſimple ſtructure. The remainder or body of the animal is imbedded in the ſhell, and bears a diſtant reſemblance to a leech.

CERAMBYX CERVICORNIS.

Character Genericus.

Antennæ ſetaceæ.
Palpi quatuor.
Thorax ſpinoſus aut gibbus.
Elytra linearia.

Lin. Syſt. Nat. Gmel. p. 1814.

Character Specificus, &c.

CERAMBYX thorace utrinque tridentato, mandibulis porrectis corniformibus ſpinoſis, elytris fuſco et flaveſcente variis.

CERAMBYX thorace marginato dentato, maxillis porrectis corniformibus utrinque ſpinoſis, antennis brevibus.

Lin. Syſt. Nat. p. 622.

CERAMBYX thorace utrinque tridentato, mandibulis porrectis, extus uniſpinoſis, antennis brevibus.

Lin. Syſt. Nat. Gmel. p. 1814.

Magnitudine naturali depingitur Cerambyx cervicornis, inter maximos ſui generis numerandus. In America meridionali præcipue conſpicitur.

THE

STAG-HORNED CERAMBYX.

Generic Character.

Antennæ ſetaceous.
Thorax either ſpinoſe or gibboſe.
Palpi four.
Wing-Caſes long or linear.

Specific Character, &c.

Great CERAMBYX, with the thorax tridentated on each ſide; the jaws reſembling horns; the wing-ſheaths variegated with brown and yellowiſh.

The Stag-horned variegated CERAMBYX.

Le BUFLARD de Cayenne.

Daubent. Pl. Enl. 90. *fig.* 3.
Mer. Sur. pl. 48.
Roes. 2. p. 12. *t.* 1. *f.* B.
Sloan. Jam. 2. *t.* 237. *f.* 6.

The Stag-horned Cerambyx, which is one of the largeſt inſects of the genus, is a native of South America, and is repreſented on the plate in its natural ſize.

ORIOLUS GALBULA.

Character Genericus.

Roſtrum conicum, convexum, acutiſſimum, rectum: mandibula ſuperiore paulo longiore, obſolete emarginata.

Lingua bifida, acuta.

Pedes ambulatorii.

Lin. Syſt. Nat. p. 160.

Character Specificus, &c.

ORIOLUS luteus, loris alis caudaque nigris, rectricibus exterioribus poſtice flavis.

ORIOLUS luteus, loris artubuſque nigris, rectricibus exterioribus poſtice flavis.

Lin. Syſt. Nat. p. 160.

TURDUS luteus.

Friſch. t. 31.

TURDUS aureus.

Klein. av. p. 66.

GALBULA.

Raii Syn. p. 68.

Oriolus Galbula, aves pleraſque Europæas pulchritudine ſuperans, quemque ſatis abundanter alit reliqua Europa, in inſulas Britannicas fortuitus hoſpes rariſſime defertur. Magnitudo eſt quaſi turdi communis. Color feminæ olivaceus.

R. 1.

THE

GOLDEN ORIOLE.

Generic Character.

Bill conic, convex, very ſharp-pointed, ſtrait: the upper mandible rather longer than the lower, and ſlightly emarginated.

Tongue bifid, ſharp-pointed.

Feet formed for walking.

Specific Character, &c.

Gold-yellow ORIOLE with black lores wings and tail: the exterior tail-feathers yellow on their lower part.

The Golden THRUSH.

Edw. t. 185.

Golden ORIOLE.

Lath. Syn. 1. p. 449.

WITWALL.

Will. orn. p. 198.

Le LORIOT.

Buf. 3. p. 254. *t.* 17.

The Oriolus Galbula, ſurpaſſing moſt of the European birds in beauty of plumage, is not uncommon

in Germany, France, and many other parts of the continent, but is ſeen only as an occaſional ſtraggler, (and even that but very rarely,) in the Britiſh dominions. Its ſize is that of a common thruſh. The female is olive-coloured.

SCARUS VIRIDIS.

Character Genericus.

Caput: *Dentium* loco maxillæ ipſæ eminentes; margine dentato-crenatæ oſſeæ.

Membrana branchioſtega radiis quinque; Operculum integerrimum.

Corpus: Linea lateralis plurimis ramoſa.

Lin. Syſt. Nat. Gmel. p. 1280.

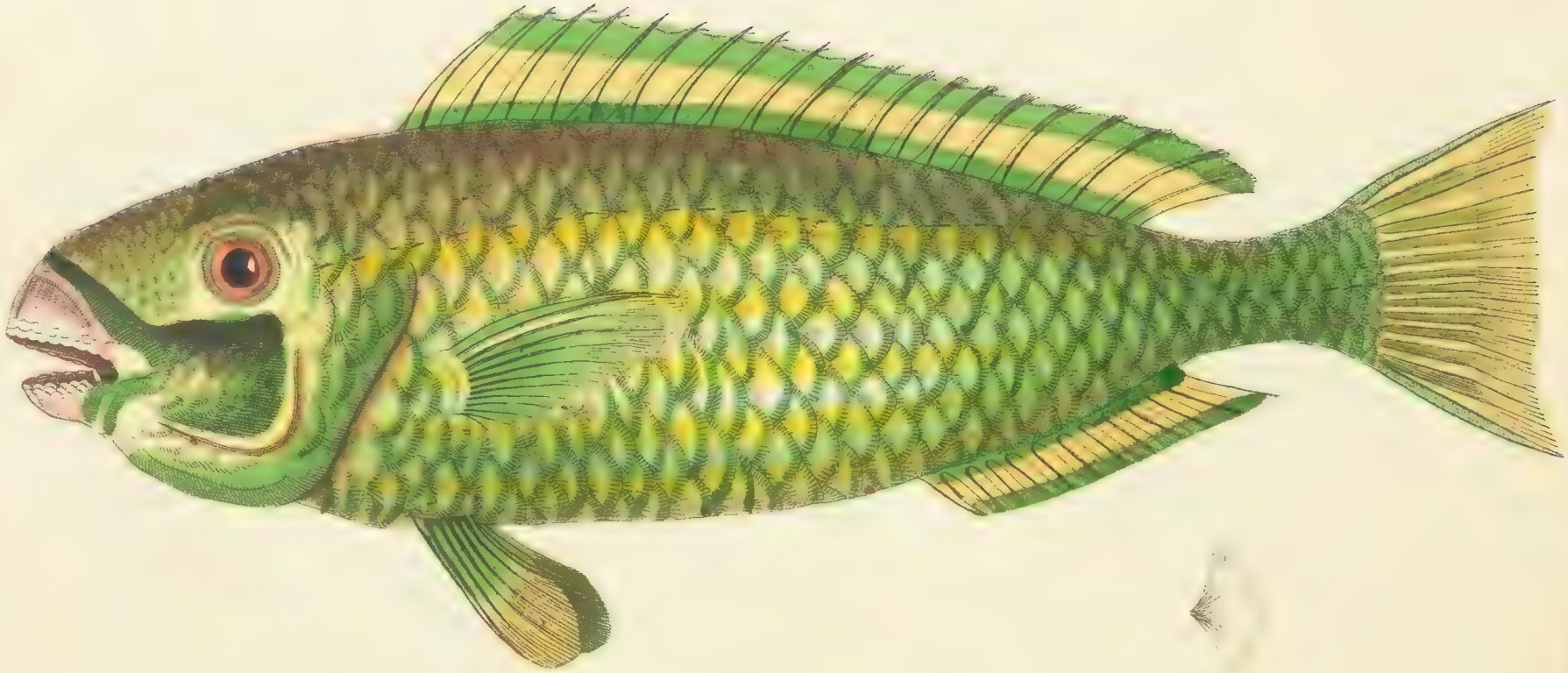
Character Specificus, &c.

SCARUS viridis, linea laterali interrupta.

SCARUS linea laterali interrupta.

Bloch auſt. Fiſch. 7. *t.* 222.

Ad generis *Scari* diſtinctionem inſignis eſt forma dentium, qui conſtant e duabus quaſi maxillis ſeu laminis oſſeis in utraque mandibula ſitis, quales ſunt in genere Tetrodontis; margine vero ſerie denticulorum ſeparatorum crenata. Hæ quoque ipſæ laminæ oſſeæ, ſi accuratius inſpiciantur, conſtare videntur in nonnullis ſpeciebus e congerie quaſi dentium minorum, ſuper ſe invicem ſerie continuata ſurgentium, adeo ut belle cælatas putes. Squamæ pluribus ſcaris magnæ ſunt, et colores vividi. Scarus quem oſtendit tabula, æquat magnitudine *Cyprinum Carpionem*, et alitur in aquis Japonicis.



R. 1°

THE

GREEN SCARUS.

Generic Character.

Strong *bony proceſſes*, crenated at the edges, inſtead of teeth.

Specific Character.

Green SCARUS, with interrupted lateral line.

The genus Scarus is eminently diſtinguiſhed by the form of its teeth, which conſiſt of a pair of ſtrong, bony proceſſes in each jaw, as in the genus Tetrodon; but marked or crenated round the edges by a number of ſeparate denticulations: the whole body alſo of the bony proceſſes themſelves, if narrowly examined, will be found to conſiſt, in ſome ſpecies, of a kind of aggregate maſs of ſmaller teeth, placed as it were in ſucceſſion over each other, and giving a beautiful kind of carved appearance to the whole. The ſcales in moſt of the Scari are large, and the colors beautiful. The preſent ſpecies is about the ſize of a Carp, and is a native of Japan.

TESTUDO IMBRICATA?

Character Genericus.

Corpus tetrapodum, caudatum, teſta obtectum.
Os mandibulis nudis, edentulis.

Lin. Syſt. Nat. p. 350.

Character Specificus, &c.

TESTUDO palmarum plantarumque unguibus binis, ſcutis laxe atque imbricatim incumbentibus?

Lin. Syſt. Nat. Gmel. p. 1036.

TESTUDO Caretta.

Raj. quadr. p. 258?

TESTUDO Marina Americana?

Seb. Muſ. 1. p. 130. *t.* 80. *fig.* 9.

Dividitur genus in teſtudines terreſtres, fluviatiles, et marinas. Marinis quæ vulgo dicuntur *Turtles*, pedes ſunt quaſi pinniformes, lati, et ſquamati. Harum præcipua eſt ſpecies Mydas dicta, hodie habita in exquiſitiſſimis dapibus. Dividi ſolet tegmen teſtudinis jam depictæ, nec non teſtudinis *Mydæ* et *Carettæ* Linnæi, in tenues lamellas artificioſe

ficioſe paratas et expolitas; unde multa et ſatis quæſtuoſa fit mercatura. Cruſtis teſtudinis lectos, domuum poſtes, et reliqua ejuſmodi decorare mos erat veteribus.

Fœcundæ admodum ſunt teſtudines pleræque marinæ, ovaque numeroſa in arena deponunt, ovis gallinaceis non abſimilia, ſed cute quaſi membranacea obtecta, et rotundata; unde poſt paucos dies excluſi pulli mari ſe illico credunt. Ampliſſima interdum eſt moles teſtudinis imbricatæ & *Mydæ*. Fuiſſe dicuntur nonnullæ pondo ſexcenis, longitudine plus quinquipedali. Communiter autem captantur bipedales, ſeu tripedales. Alitur præcipue teſtudo imbricata in maribus Americanis, frequentior apud inſulas Jamaicæ, Cubæ, Hiſpaniolæ, &c. Victitat, ut ſolent aliæ teſtudines marinæ, teſtaceis, ſepiis, fucis, reliquiſque ejuſmodi.

THE

IMBRICATED TORTOISE.

Generic Character.

Body four-footed, tailed; covered with a ſhell.
Mouth with uncovered, toothleſs, bony mandibles.

Specific Character, &c.

SEA-TORTOISE with two claws on each foot; the ſhell conſiſting of laxly-imbricated, acuminated ſcales.

Hawk's-Bill TURTLE?

Brown. Jam. p. 465.

Scaly TORTOISE?

Grew. Muſ. p. 38. *t.* 3.

The animals of this genus are divided into land, river, and ſea tortoiſes; which latter are commonly diſtinguiſhed by the name of Turtles; and are furniſhed with broad, flat feet, reſembling a kind of thick, ſcaly fins. Of theſe the moſt important ſpecies is the Teſtudo Mydas, which has long been celebrated for the peculiar delicacy of its fleſh, and which forms a principal article in the repaſts of modern

modern epicures. It is from the ſpecies here repreſented, as well as from the Caretta and Mydas of Linnæus, that a great part of what is commonly called tortoiſe-ſhell is procured; and which, when properly prepared and poliſhed, affords ſo many beautiful and valuable articles of commerce. The ancients were well acquainted with the ornamental uſe of tortoiſe-ſhell, and applied it to the decoration of their houſes, &c.

Moſt of the animals of this tribe are extremely prolific, and depoſit their eggs, which are about the ſize of hen's eggs, but round, and covered with a membranaceous ſkin, under the ſand; which, after a certain number of days, are hatched; and the young immediately betake themſelves to the ſea. The Teſtudo imbricata and Mydas grow ſometimes to a vaſt ſize; and have been ſeen of the length of five or ſix feet, and of the weight of many hundred pounds: the general length however is about two or three feet. This ſpecies is a native of the American ſeas, and is common about the coaſts of Jamaica, Cuba, Hiſpaniola, &c. Like the reſt of its tribe, it feeds on ſhell-fiſh, cuttles, fuci, &c. &c.

PHALÆNA CAJA.

Character Genericus.

Antennæ ſetaceæ, a baſi ad apicem ſenſim attenuatæ.

Alæ (ſedentis) ſæpius deflexæ. (Volatu nocturno.)
Lin. Syſt. Nat. p. 808.

Character Specificus, &c.

PHALÆNA *Bombyx* alis albis fuſco maculatis; inferioribus rubris nigro maculatis.

PHALÆNA *Bombyx* elinguis, alis deflexis fuſcis, rivulis albis; inferioribus purpureis nigro punctatis.
Lin. Syſt. Nat. p. 819.
Goed. inſ. t. 17.
Roes. inſ. 1. *phal.* 2. *t.* 1.
Mouff. inſ. 93. *f.* 15.
Aldr. inſ. 246. *f.* 11. 12.

Polyphaga vocatur larva pulcherrimi hujus inſecti; depaſcitur nempe varia gramina, plantaginem, et alia vegetabilia. In chryſalidem plerumque convertitur menſe Junio, tela quadam tenui cooperta. Erumpere ſolet phalæna menſibus Julio et Auguſto.

THE

TIGER MOTH.

Generic Character.

Antennæ or *Horns* ſetaceous, decreaſing in ſize from the baſe to the point.

Wings, when at reſt, genenerally deflected.

Flight moſtly nocturnal.

Specific Character, &c.

PHALÆNA with the upper wings cream-coloured, ſpotted with brown; the lower wings red, ſpotted with black.

The Great Tiger Moth.

Merian. inſ. Eur. t. 5.
Albin. inſ. t. 20.
Degeer. inſ. 1. *t.* 12. *f.* 8. 9.
Seba. 4. p. 63. *t.* 52. *fig.* 1. 1—4.
Sepp. inſ. 4. *t.* 9. *f.* 2.

The Larva or Caterpillar of this beautiful Moth is of a polyphagous nature; feeding indiſcriminately on graſs, plantain, and a variety of other vegetables. It commonly changes to a chryſalis in June, enveloping itſelf in a web of a ſlight texture. The Moth appears in July and Auguſt.

CERTHIA MURARIA.

Character Genericus.

Roſtrum arcuatum, tenue, ſubtrigonum, acutum.
Lingua acuta.
Pedes ambulatorii.

Lin. Syſt. Nat. p. 184.

Character Specificus, &c.

CERTHIA cinerea, alis caudaque nigris; tectricibus roſeis, remigibus roſeo marginatis.

CERTHIA cinerea, macula alarum fulva.

Lin. Syſt. Nat. p. 184.

PICUS muralis.

Geſn. av. p. 712.

PICUS murarius.

Aldr. av. 1. p. 851.
Will. orn. p. 99. *t.* 23.

Italiam ſibi ſedem præcipuam ſelegit Certhia muraria; rara tamen et ibi; in reliqua Europa longe rarior. In muris turrium aliorumque ædificiorum, ut plurimum, ſolet reptare, necem parans inſectis. Solivaga eſt avis, nec unquam volat gregatim. Maris guttur ſtria ſeu faſcia nigra diſtinguitur. Oſtenditur in tabula naturalis magnitudo.

THE

WALL CREEPER.

Generic Character.

Bill ſlender, incurvated, ſharp-pointed.

Tongue differing in the different ſpecies.

Toes three before; one behind: claws hooked and long.

Specific Character, &c.

Grey CREEPER, with black wings and tail; the coverts roſe-coloured; the quills edged with roſe-colour.

The WALL-CREEPER, or Spider-catcher.

Will. orn. p. 143. *t.* 23.

Le GRIMPEREAU de muraille.

Buf. ois. 5. p. 487. *t.* 22.

The Certhia Muraria or Wall Creeper may be conſidered as one of the rarer European birds, being very little known in any other country except Italy; and even there it is by no means common. It principally frequents towers and other edifices, creeping about the walls in queſt of inſects. It is a bird of a ſolitary nature, and is never ſeen in flocks. The male is diſtinguiſhed by a black ſtripe or longitudinal patch on the throat. The plate repreſents it in its natural ſize.

TEREBELLA MADREPORARUM.

Character Genericus.

Corpus oblongum repens nudum, branchiis ad latera inſtructum, ſæpius in tubulo.

Os anterius labiatum edentulum, proboſcidem clavatam exſerens.

Tentacula circum os capillaria, plura, ciliata.

Lin. Syſt. Nat. Gmel. p. 3112.

Character Specificus, &c.

TEREBELLA tentaculis ſpiraliter faſciculatis, proboſcidis diſco bicorni.

TEREBELLA proboſcidis diſco ſimplici terminali bicorni ? ?

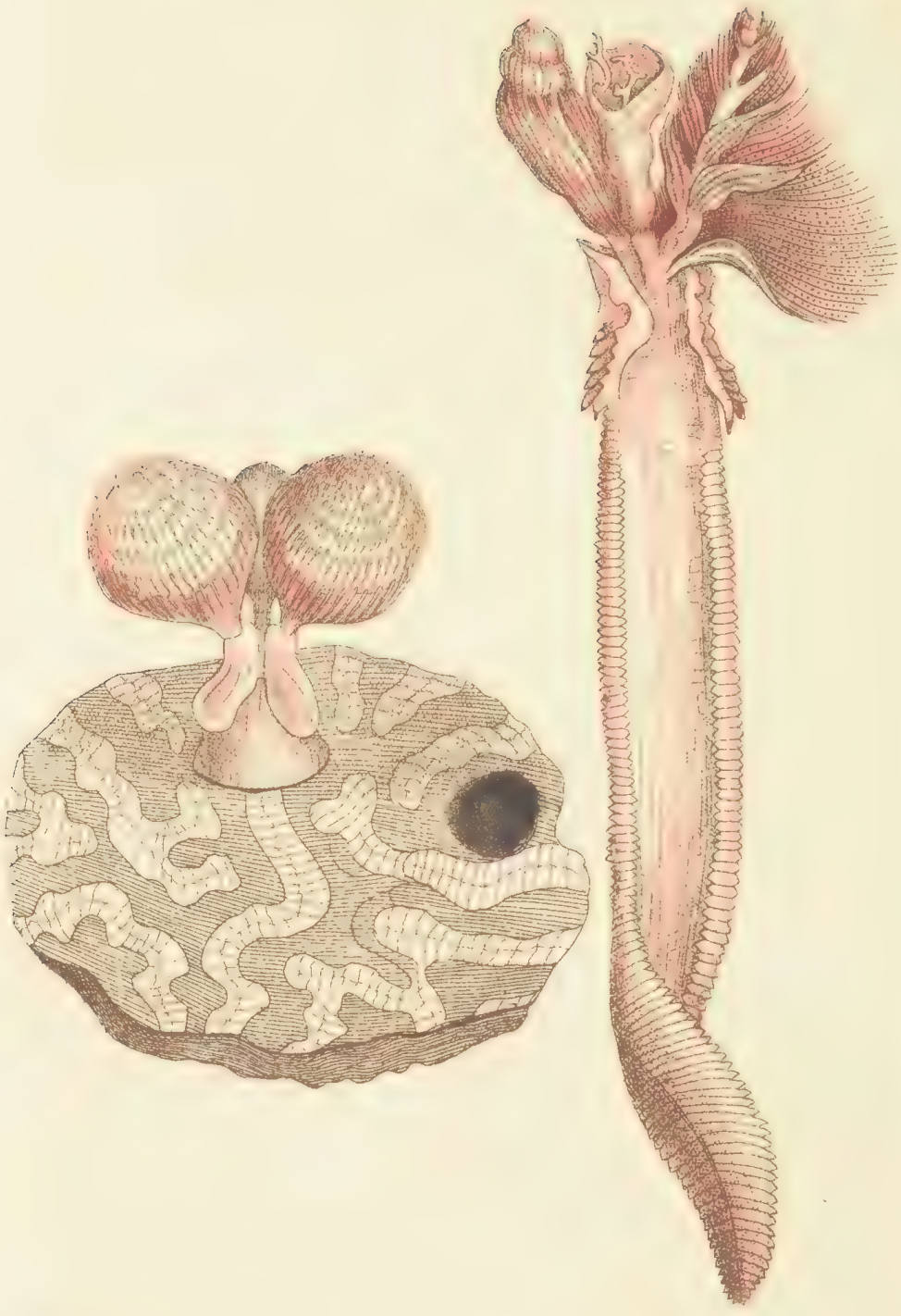
Lin. Syſt. Nat. Gmel. p. 3114.

Act. Angl. tom. 75. p. 333. *t.* 11.

In opere hoc noſtro jam antea notatum eſt, foramina quæ in Madreporis magnis et globoſis ſæpius cernuntur, non a natura originem ducere, ſed ab animali aliquo ſedem ſibi in madrepora quærente, eſſe terebrata. Qui de hoc plus doceri cupit, adeat lector Actorum Anglicorum volumen ſeptuageſimum quintum,

quintum, in quo inſigne profertur exemplum ab ingenioſo Domino Home, qui commentario ſuo adjecit quicquid præterea obſervavit celeberrimus Joannes Hunterus. Et quantum colligere poſſumus a figura, quam inde in tabellam noſtram tranſtulimus, ut melius illuſtraretur res de qua quæritur; cenſemus animal in madrepora latitans, ſpeciem eſſe Terebellæ; quæ cum ſemel madreporam terebraverit, manet in cavo, exinde ſe, ut veriſimile eſt, ad libitum protrudens, prædæ ſtudio.

Figura prima oſtendit animal e foramine exemptum. Secunda fruſtum madreporæ cum cellula in qua latet Terebella.



THE

MADREPORE TEREBELLA.

Generic Character.

Body oblong, repent, naked: often inhabiting a tube.

Mouth without teeth, in ſome ſpecies exſerting a clavated proboſcis.

Tentacula ſeveral, capillary and ciliated; in ſome ſpecies faſciculated.

Specific Character.

TEREBELLA with ſpirally faſciculated tentacula; the head of the proboſcis furniſhed with two horns.

It has been already obſerved in the courſe of the preſent work, that the foramina which frequently appear in ſome of the larger globoſe Madrepores, are not always owing to the natural ſtructure of the coral, but rather to the operation of ſome other animal, which thus forms itſelf a habitation in the madrepore. Of this a curious inſtance has been obſerved by the ingenious Mr. Home, whoſe memoir on this ſubject may be ſeen in the ſeventy-fifth volume

volume of the Philoſophical Tranſactions, accompanied by ſome farther obſervations by Mr. John Hunter. From the figure there given, and which we have here copied, as an illuſtration of this particular, it appears that the animal ſhould be conſidered as a ſpecies of Terebella, which, when it has formed itſelf a hole in the madrepore, continues to reſide there, and may be ſuppoſed to protrude itſelf occaſionally from its cell in queſt of prey.

Fig. 1. The animal taken out of its cell.

Fig. 2. A piece of the madrepore, with the cell in which the terebella reſides.

COLUBER RUSSELII.

Character Genericus.

Scuta abdominalia.
Squamæ ſubcaudales.

Lin. Syſt. Nat. p. 275.

Character Specificus.

COLŬBER fuſco-flaveſcens, maculis dorſalibus ovato-acuminatis nigricantibus albo marginatis, lateralibus minoribus ovatis.

Scuta abdominalia 168. *Squamæ ſubcaudales* 59.

Longus eſt quaſi quatuor pedes ſerpens quem deſcribere in animo eſt. Capitis largiuſculi pars ſuperior ſquamis parvulis contegitur. Naſus obtuſus. Rictus oris amplus. Tela magna, et (quod variis ſerpentibus venenatis contingit), duplicia; minus nempe in utraque maxilla adjacet majori. Color eleganter fuſco-flaveſcit, ducta per totam dorſi longitudinem macularum fuſcarum, rhombiformium, ſeu potius ovatarum ſerie continua, quarum medium pallet, margines albent; quæque aliquibus in locis confluunt, ut cernere eſt in tabula. Utrinque in lateribus ſitæ ſunt maculæ ovatæ, fuſcæ, minores iis

quæ

quæ in tergo ſunt; et præterea tranſverſim ſpargun-tur aliæ vel his minores. Corpus inferius albet, ſcutorum ſeu lamellarum multarum marginibus no-tas aliquot fuſcas habentibus.

Speciem hanc primus deſcripſit Dominus Ruſſel-ius, libri auctor de Serpentibus Indicis, quique ſpe-cimine quod depinximus Muſeum Britannicum di-tavit. Narrat Ruſſelius in India non rarius reperiri hunc ſerpentem quam ipſe *Coluber Naja*; eique vix et ne vix cedere telo venenato: ſuis enim experimen-tis probavit vir doctus, horæ momento poſt morſum tricies et ſex elapſo, interiiſſe pullos gallinaceos; ipſum autem canem, exacto fere ſemihoræ ſpatio.

A. 1.

THE

RUSSELIAN SNAKE.

Generic Character.

Tranſverſe *Lamellæ* under the abdomen.
Broad alternate *Scales* under the tail.

Specific Character, &c.

Browniſh-yellow SNAKE, with acutely-ovate blackiſh dorſal ſpots edged with white, and ſmaller ovate lateral ones.

Abdominal lamellæ 168. *Subcaudal ſcales* 59.

Katuka Rekula Poda.
Ruſſel's Indian Serpents. p. 10. *pl.* 7.

The length of this remarkable ſnake is about four feet: the head is rather large, and covered on its upper part with ſmall ſcales: the ſnout obtuſe: the mouth wide: the fangs large, and, (as in ſeveral other poiſonous ſerpents), double; a ſmaller fang being ſituated cloſe to the larger one on each ſide. The color of the animal is an elegant pale yellowiſh brown, marked throughout the whole length of the back with a continued chain or ſeries of large rhomboid, or rather oval ſpots of deep brown, with paler

ler middles, and narrow white edges: in ſome parts theſe ſpots are nearly confluent, as ſhewn in the figure: on each ſide of the body is a row of brown oval ſpots, ſmaller than thoſe on the back; and beſides theſe a few ſtill ſmaller tranſverſe marks are ſcattered here and there on the ſides: the under part of the body is white, with a few duſky ſpots.

This ſpecies appears to have been firſt deſcribed by Dr. Patrick Ruſſel, who preſented the elegant ſpecimen here figured to the Britiſh Muſeum. Dr. Ruſſel, in his work on Indian Serpents, informs us that it is ſcarce leſs common in India than the Coluber Naja or Cobra de Capello; and that its poiſon is nearly as deleterious. Its bite, according to Dr. Ruſſel's experiments, proved fatal to chickens in thirty-ſix ſeconds, and to a dog in twenty-ſix minutes.

DYTISCUS PICEUS.

Character Genericus.

Antennæ ſetaceæ, aut clavato-perfoliatæ.
Pedes poſtici villoſi, natatorii, ſubmutici.
Lin. Syſt. Nat. p. 664.

Character Specificus, &c.

DYTISCUS niger nitidus, antennis perfoliatis, ſterno poſtice mucronato.

DYTISCUS antennis perfoliatis, corpore lævi, ſterno carinato, poſtice mucronato.
Lin. Syſt. Nat. p. 664.

HYDROPHILUS ruficornis.
Degeer. 4. p. 371. *t.* 14. *f.* 1. 2.

DYTISCUS haſtatus.
Herbſt. Beſch. der naturf. Berl. Fr. 4. *t.* 7. *f.* 2.

HYDROPHILUS niger, &c.
Geoffr. inſ. Par. 1. p. 182. *t.* 3. *f.* 1.

SCARABEE, &c.
Lyonet Leſſ. t. 2. p. 54. *n.* 110. *t.* 1. *f.* 15—17.

Omnium qui in Britannia generantur maximus eſt Dytiſcus piceus. A cæteris facillime dignoſcitur, quippe

quippe qui totus nigerrimus thoracem inferiorem ſolus gerat mucronatum; quod non niſi paucis exoticis contingit, nulli præter hunc Britannico. Aliæ licet ſpecies magis abundent, hujus tamen nulla eſt penuria. Piſcinas amat aquaſque ſtagnantes, larvaque ejus ut et aliorum Dytiſcorum atrociſſime prædatur teneriora inſecta, nec non vermes et piſciculos, quos oris forcipibus correptos ſugendo enecat. Hujus aliorumque majorum Dytiſcorum juniores ab antiquioribus phyſicis nomine *Squillarum aquaticarum* deſcribi ſoliti ſunt; eſſe enim eos revera larvas tunc temporis ignorabant. Licet inter larvas diverſarum ſpecierum maxima ſit ſimilitudo, hujus tamen cæteris major ſibi peculiare quiddam habet et anomalum, cui vix ſimile in aliis animalibus invenias: crura nempe, ni penitius examinentur, non ut aliorum inſectorum, ſub thorace ſita videntur, ſed ſupra, indeque ad latera deflecti. Crura autem non revera dorſo inſeruntur, ſed oritur deceptio a peculiari quadam conformatione ſituque capitis; augetque deceptionem larvæ tum natantis tum quieſcentis inverſa plerumque poſitio; adeo ut difficile ſit vel exercitatiſſimo phyſico errorem ſemel conceptum ex animo excutere. Friſchius in hiſtoria inſectorum ne minimum dubitaſſe videtur crura reapſe eſſe dorſo inſerta: et celeberrimus Reaumurius cum huic ſimile aliquod in alio inſecto aquatico obſervaſſet, attonitus rei novitate phænomenon unicum nec alibi uſpiam conſpectum commemoravit. Auctor quoque quarti voluminis Sebæ Theſauri lectores ſedulo admonet, ſculptorem corrigere volentem quod falſo et inſcite delineatum putavit, pedes hujus larvæ non ſupra

thoracem

thoracem ſed ſubtus depinxiſſe. Lyonettus autem, multo vir acumine, in notas quas adjecit libro Leſſeri, cui titulus "Theologie des Inſectes," errorem vulgarem primus videtur detexiſſe, et veram larvæ conformationem luculenter deſcripſiſſe.

Dytiſcorum larvæ non niſi poſt duos? circiter annos in pupas ſeu chryſalidas transformantur: cum enim ad plenam magnitudinem pervenerint, in cavo aliquo ripæ latibulo torpidæ aliquandiu dormiunt; deinde cutim exuunt et chryſalides fiunt. Elapſo certo tempore, iterum exuviæ abjiciuntur, ipſeque Dytiſcus jam plene formatus erumpit; qui chryſalidis cute primum depoſita, tenerrimus eſt et coloris pallidi; paucis vero horis elytra ſeu alarum tegumenta ſatis indurantur, colore gradatim magis magiſque fuſco donec penitus nigraverit; et tum demum inſectum nova gaudens forma, nec alias ullas vices ſubiturum, aquis ſe audacter concredit.

Mares Dytiſcos diſtinguit a feminis crurum anticorum diverſitas, quæ juxta pedum inſitionem concava quadam cornea et rotundata parte velut clypeolo inſtruuntur, quo prorſus carent crura feminea. Toti generi peculiaris eſt et miranda crurum poſticorum formatio, quorum latera interiora ſerie pilorum longorum et denſorum obſita ſunt, pinnas quodammodo referentium; quibus magnopere in natando adjuvantur. Notandum porro eſt Dytiſcum feminam ſpeciei jam depictæ exemplum præbere artis, aliis (ut videtur) inſectis coleoptratis penitus incognitæ; telam nempe nendi complanatam, circularem, ſericam, quam ſuper aquas libere fluitantem relinquit, ibique ova ſua deponit; cujuſque

ſuper-

ſuperficies ſuperior cornu in formam quaſi coni creſcente terminatur, longo, fuſco, et denſiori ipſa theca, quæ albet. Larvæ ut primum a thecæ carcere liberantur, aquis ſe illico credunt. Quod mirum in hiſtoria Dytiſci primus notavit Dominus Lyonettus.

Cavendum eſt putemus Dytiſcos non poſſe ſub dio vivere; frequenter enim per prata vagantur, in hanc vel illam aquam ad libitum ſe recipientes: quod cum noctu præcipue fiat, non mirum eſt ſi ignoretur. Si incaute ex aquis nuda manu excipiatur Dytiſcus piceus, eo eſt robore ut cutim mucrone thoracico interdum luctando vulneret.

THE

GREAT DYTISCUS.

Generic Character.

Antennæ either ſetaceous or clavato-perfoliate.

Hind Feet formed for ſwimming, villoſe on the interior ſide, and ſcarce perceptibly clawed.

Specific Character, &c.

Gloſſy-black DYTISCUS, with perfoliate antennæ and long thoracic ſpine pointing backwards.

The large Black WATER-BEETLE.

The Spiked WATER-CLOCK.

Grew. Muſ. p. 170.

The inſect here figured is the largeſt of all the Britiſh Dytiſci, and is at once diſtinguiſhed by its uniform blackneſs, and by the remarkable ſpine or proceſs proceeding from the lower part of the thorax; and which, though occurring in ſome exotic Dytiſci, is found in no other Britiſh ſpecies. It is not a very uncommon animal, though far more ſo than ſome others of the genus. It is found in ponds and ſtagnant waters; where its larva, like thoſe of other

other ſpecies, commits great havoc amongſt the more tender aquatic inſects, as well as amongſt worms and young fiſh, which it ſeizes with its forcipated jaws, and deſtroys by ſucking out their juices. The larvæ of the larger Dytiſci were deſcribed by the older writers on natural hiſtory under the title of *Squillæ aquaticæ;* and were not at that time known to be Dytiſci in their firſt or caterpillar ſtate. There is a great ſimilarity between the larvæ of the different Dytiſci; but that of the preſent ſpecies is diſtinguiſhed by a particularity ſo very remarkable as ſcarce to be equalled by any other creature. This conſiſts in the apparently anomalous ſituation of the legs; which ſeem, unleſs very accurately examined, to be placed, not beneath the thorax, as in other inſects, but on the upper part, and from thence to be deflected towards the ſides. This uncommon appearance however is not owing to a real dorſal inſtead of ventral inſertion of the legs, but principally to the peculiar ſhape and poſition of the head; and the deception is ſo much heightened by the inverted poſture in which the inſect generally ſwims and reſts, that it is by no means eaſy even for the moſt ſcientific obſerver to diveſt himſelf of the erroneous idea before mentioned. Friſch, in his Hiſtory of Inſects, appears to have been completely convinced of the real dorſal inſertion of the legs; and the celebrated Reaumur, having diſcovered ſomething ſimilar in another aquatic inſect, was ſo ſtruck with the unuſual appearance, that he has commemorated it as a circumſtance unparalleled in the animal world. The author of

the

the fourth volume of Seba's Theſaurus was of the ſame opinion, and expreſsly warns his readers that his engraver, thinking to rectify what he ſuppoſed an erroneous drawing, has repreſented the legs in this larva as ſituated beneath the thorax, and not on the upper part. The ſagacious Lyonett, in his obſervations on Leſſer's "Theologie des Inſectes," ſeems to have been the firſt who detected the common error, and aſcertained the real ſtructure of the animal, which he has clearly and ſatisfactorily explained.

The larvæ of the Dytiſci remain about two? years before they change into pupæ or chryſalides. When the larva is arrived at its full growth, it ſecretes itſelf in the bank of the water it inhabits, and having formed a convenient cavity or cell, lies dormant for ſome time; after which it diveſts itſelf of its ſkin, and appears in the form of a chryſalis; in which ſtate having continued for ſome time longer, it again delivers itſelf from its exuviæ, and appears in its complete or Beetle form. When firſt diſengaged from the ſkin of the chryſalis, it is of a pale color, and very tender: in the ſpace however of a few hours, the elytra or wing-caſes acquire a degree of ſtrength and a dark color, which gradually grows more and more intenſe, till the animal, finding itſelf ſufficiently ſtrong, comes forth from its retreat, and commits itſelf in its new form to the waters.

The male Dytiſci are diſtinguiſhed from the females by the ſtructure of the fore legs, which are furniſhed, near the ſetting on of the feet, with a ſort of horny, concave flap or ſhield: the legs of the

ſemales are deſtitute of this part. The ſtructure of the hind legs, in the whole genus Dytiſcus is ſingularly curious, and finely calculated for their aquatic mode of life; being furniſhed on the interior ſide with a ſeries of long and cloſe-ſet filaments, ſo as to give a ſort of finny appearance to the legs, and to enable the animal to ſwim with the greateſt eaſe and celerity. It may be added that the female of the Dytiſcus piceus affords an example of a faculty which ſeems to be exerciſed by no other coleopterous inſects; viz. that of ſpinning a kind of web or flattiſh, circular caſe of ſilk, which it leaves floating on the ſurface of the water, and in which it depoſits its eggs: this caſe is terminated on its upper ſurface by a lengthened, conical proceſs reſembling a horn; of a brown color, and of a much ſtronger or denſer nature than the caſe itſelf, which is white. The young larvæ, as ſoon as hatched, make their eſcape from the envelopement of the caſe, and commit themſelves to the water. This curious particular in the hiſtory of the Dytiſcus piceus was firſt diſcovered by Lyonett.

It is not to be imagined that becauſe the Dytiſci are ſo generally ſeen in the water, they are therefore incapable of living in air: on the contrary, they ſometimes emerge, and fly about the fields, and thus migrate from water to water: but as this happens chiefly by night, it is not generally obſerved.

The Dytiſcus piceus is an inſect of great ſtrength, and if incautiouſly handled when taken out of the water, will ſtruggle in the hand with ſo much force as ſometimes to wound the ſkin with its thoracic ſpine.

TANTALUS GANGETICUS.

Character Genericus.

Roſtrum longum, ſubulatum, teretiuſculum, ſubarcuatum.
Facies ultra oculos nuda.
Lingua brevis, lata.
Saccus jugularis nudus.
Nares ovatæ.
Pedes tetradactyli, baſi palmati.

Lin. Syſt. Nat. p. 240.

Character Specificus, &c.

TANTALUS albus, tectricibus alarum remigibuſque nigricantibus, uropygio roſeo.

TANTALUS leucocephalus.

Lath. ind. orn. 2. p. 706.
Lin. Syſt. Nat. Gmel. p. 649.

In India innaſcitur Tantalus Gangeticus; magnitudine Ciconiam æquans vel ſuperans. In Ceylonia quoque, aliiſque inſulis indicis conſpicitur. Roſtrum flavum. Pedes carnei.

THE

GANGETIC IBIS.

Generic Character.

Bill long, thick at the baſe, incurvated.
Face, and ſometimes the whole head, naked.
Noſtrils linear.
Tongue ſhort.
Toes connected at the baſe by a membrane.

Specific Character, &c.

White IBIS, with the wing-coverts and remiges blackiſh; the tail-coverts roſe-coloured.

White-headed IBIS.

Pennt. Ind. Zool. p. 47. *t.* 11.
Lath. Syn. 3. *p.* 116.

The Gangetic Ibis is a native of India, and is alſo found in Ceylon and other Indian iſlands. In ſize it is equal, or rather ſuperior to the common Stork. The bill is yellow: the legs pale roſe-color.

LERNÆÆ.

Character Genericus.

Corpus ſe affigens tentaculis, oblongum, teretiuſculum.

Ovaria bina, tanquam totidem caudæ.

Tentacula brachiformia duo ſeu tria.

Lin. Syſt. Nat. p. 1092.

Characteres Specifici, &c.

LERNÆA radiata.

L. corpore quadrato depreſſo, brachiis utrinque tribus, cornubus quatuor rectis.

Müll. zool. dan. 1. p. 122. *n.* 57. *t.* 33. *fig.* 4.

Lin. Syſt. Nat. Gmel. p. 3146.

Habitat in Coryphænæ rupeſtris oris angulis.

LERNÆA gobina.

L. corpore rhomboidali, brachiis duobus anterioribus totidemque poſterioribus nodoſis, cornubus duobus arietinis.

Müll. zool. dan. 1. p. 121. *t.* 33. *fig.* 3.

Lin. Syſt. Nat. Gmel. p. 3145.

Habitat in Cotti Gobionis branchiis.

LERNÆA nodoſa.

L. corpore quadrato tuberculato, brachiis ſubtus breviſſimis utrinque duobus.

Müll. zool. dan. 1. p. 123. *n.* 58. *t.* 33. *fig.* 5.

Lin. Syſt. Nat. Gmel. p. 3146.

Habitat in Percæ Norwegicæ rictu.

LERNÆA cornuta.

L. corpore oblongo, brachiis quatuor rectis emarginatis, capite ſubovato.

Müll. zool. dan. 1. p. 124. *n.* 59. *t.* 33. *fig.* 6.

Lin. Syſt. Nat. Gmel. p. 3146.

Habitat in Pleuronectis Plateſſa et Linguatula.

LERNÆA pectoralis.

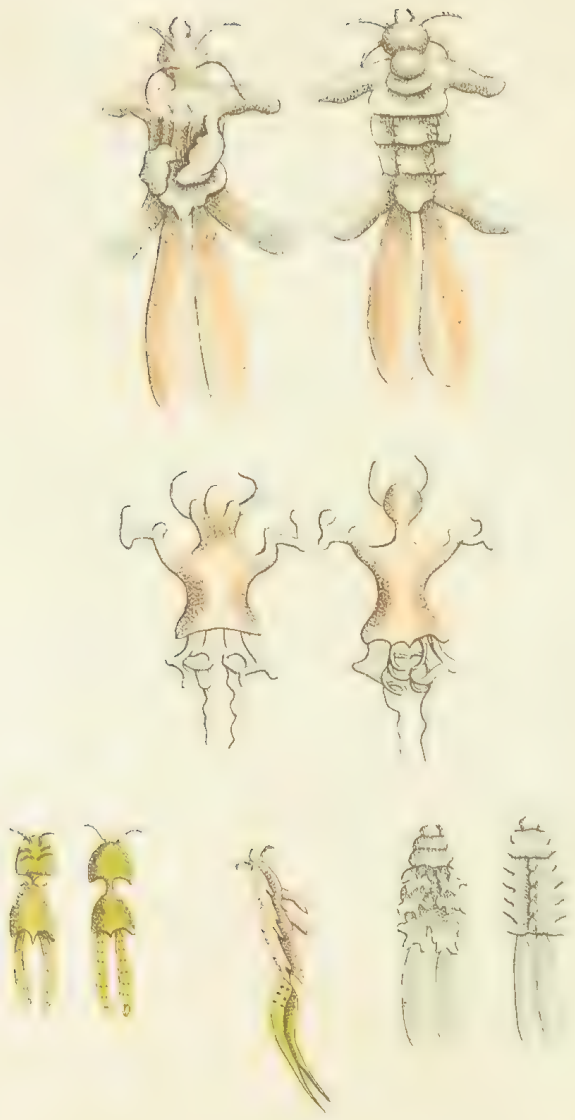
L. capite orbiculato hemiſphærico, abdominis obcordati papilla terminali truncata.

Müll. zool. dan. 1. p. 125. *n.* 60. *t.* 33. *fig.* 7.

Lin. Syſt. Nat. Gmel. p. 3146.

Habitat in Pleuronectarum et Æglefini pinnis.

Piſcium corporibus affigunt ſe Lernææ, branchiis præcipue et pinnis adhærentes. Depinguntur ſpecies in tabula vera magnitudine juxta ipſam naturam.



LERNÆÆ.

GENERIC CHARACTER.

Body oblong ſomewhat cylindric, affixing itſelf by tentacula.

Ovaries two, reſembling tails.

Tentacula reſembling arms, two or three in number on each ſide.

SPECIFIC CHARACTERS, &c.

Radiated LERNÆA.

LERNÆA with ſquare depreſſed body, three pair of arms and four ſtrait horns.

It is found about the mouth of the Coryphæna rupeſtris.

Gobian LERNÆA.

LERNÆA with rhomboid body, two nodoſe anterior and poſterior arms, and two curved horns.

It is found on the gills of the Cottus Gobio.

Knotty LERNÆA.

LERNÆA with ſquare tuberculated body, with two very ſhort ams beneath on each ſide.

Found in the mouth of the Perca norvegica.

Horned

Horned LERNÆA.

LERNÆA with oblong body, four ſtrait emarginated arms, and ſubovate head.

Found on the Plaiſe, &c.

Pectoral LERNÆA.

LERNÆA with orbiculated hemiſpheric head and obcordate abdomen with a terminal truncated papilla.

Found on the gills and pectoral fins of Flounders, &c. &c.

The Lernææ affix themſelves to the bodies of fiſh; adhering principally to the branchiæ and fins. The ſpecies figured on the annexed plate are all repreſented in their natural ſize.

BULLA? OCCIDUA.

Character Genericus.

Animal Limax.
Teſta univalvis, convoluta, inermis.
Apertura coarctata, oblonga, longitudinalis.
Columella obliqua, lævis.

Lin. Syſt. Nat. p. 1181.

Character Specificus, &c.

BULLA? (Helix?) ovato-oblonga, craſſa, albida, ſpira obtuſa, labio purpureo.

HELIX oblonga. H. teſta perforata ovato-oblonga, ſtriata, labro columellaque roſeis.

Müll. Hiſt. Verm. p. 86. *n.* 284.

PSEUDO-AURIS MIDÆ, teſta ovali oblonga, ſubumbilicata, tumida, craſſa, anfractibus ſex ventricoſis, apice obtuſo, labro et labio roſeis, apertura ovata integerrima.

Martini. Vol. 9. p. 30. *t.* 119. *fig.* 1022. 1023.

BUCCINUM admodum craſſum, &c. &c.

Liſt. conch. t. 23. *fig.* 21. *&c. t.* 1055. *fig.* 1.

COCHLEA

COCHLEA terreſtris Americana Plumieri.
Liſt. it. Par. p. 74. *t.* 3.

HELIX oblonga.
Born. Muſ. Cæs. Vind. teſt. t. 15. *fig.* 21. 22.

HELIX oblonga.
Lin. Syſt. Nat. Gmel. p. 3637.

COCHLEÆ lævæ.
Seb. Muſ. 3. *t.* 71. *fig.* 17—20.

Facie formaque generali affinis admodum eſt Bulla Occidua perpulchræ Bullæ achatinæ, quam in hoc opere jam depinximus. Ab illa tamen facile dignoſci poſſit, quod craſſior multo ſit, labio non tenui, quale eſt Bullæ achatinæ, ſed circa teſtæ hiatum ſolidam in marginem ducto. Differt quoque colore; nam alba paulatim ſubflavet, labio pulchre roſeo, (quo etiam leviter inficitur interna teſtæ ſuperficies,) caretque omnino eleganti illa variatione qua decoratur Bulla achatina. Terreſtris eſt ſpecies, et in variis Americæ meridionalis partibus non raro reperitur, nec non in inſulis Americanis ſeu occiduis. Animal teſtam incolens helici communi ſimillimum eſt. Color eſt cinereus, umbris ſtriiſque huc illuc obſcurioribus et lucidioribus variatus, et in aliquibus partibus ſub-cæruleo et roſeo commiſtus. Viro celeberrimo Carolo Plumiero, quem circiter finem ſæculi jam elapſi merito inſigniverunt

ſcripta

ſcripta quæ congeſſit de naturali novi orbis hiſtoria, de botanice præcipue, figuram archetypam debemus, quam in tabula imitati ſumus, quamque cum Liſtero in Luteſia Pariſiorum agente, communicavit Plumierus. Ova quæ deponit Bulla occidua putamine calcario conteguntur, et tum forma tum magnitudine ad ovorum paſſeris vulgaris ſimilitudinem tam prope dicuntur accedere, ut ab iis vix ac ne vix poſſint diſtingui.

THE

OCCIDENTAL BULLA.

Generic Character.

Animal reſembling a Limax or Slug.

Shell univalve, convoluted.

Aperture ſomewhat ſtraitened, oblong, longitudinal, entire at the baſe.

Column oblique and ſmooth.

Specific Character, &c.

Ovate-oblong thick BULLA? (Helix?) with obtuſe ſpire, and purple lip.

The Roſe-lipped SNAIL.

Roſe-mouthed BULLA.

Surinam SNAIL.

Oviparous SNAIL.

Der Roſenmund. } *Martini. Vol.* 9. p. 30. *t.* 119.
Roodlip. } *fig.* 1022. 1023.

FAUSSE Oreille de Midas.

Davil. Cat. 1. p. 134. *n.* 166.

Der roſenmundige SCHNIRKEL.

Born. Muſ. Cæſ. p. 381. *t.* 15.
fig. 21. 22.

La

La FAUSSE Oreille de Midas.

Favanne conch. t. 65. *fig.* 1.

Surinam HELIX.

Cat. Muſ. Port. p. 55. *n.* 1299.
p. 39. *n.* 933.
p. 82. *n.* 1835.
p. 174. *n.* 3745.

In its general appearance this ſhell is very nearly allied to the beautiful ſpecies called Bulla achatina, already figured in the preſent work: it is however readily diſtinguiſhed by its far thicker or more ſolid ſubſtance, by the lip or edge, which inſtead of being thin, as in that ſhell, forms a ſtrong ridge or border round the opening, and by its total want of the beautiful variegations ſo conſpicuous on the ſurface of the Bulla achatina; being merely of a dull white, with the border or lip before-mentioned of an elegant purple or roſe-color: the inſide of the ſhell has alſo a ſlight tinge of the ſame color. It is a terreſtrial ſpecies, and is not very uncommon in ſeveral parts of South America, as well as the Weſt Indian Iſlands. The inhabiting animal, which bears the moſt ſtriking reſemblance to the common ſnail, is of a cinereous color, varied with lighter and darker ſhades and ſtreaks; with a tinge of blueiſh and roſe-color on ſome parts. It is to the celebrated Father Plumier, ſo diſtinguiſhed towards the latter part of the laſt century for his reſearches into the

the natural hiſtory of the new world, and more particularly in the botanical department, that we owe the original of the elegant repreſentation on the preſent plate; the drawing having been communicated by Plumier to Dr. Liſter during the time of his reſidence in Paris.

The eggs which this animal depoſits are covered with a hard calcareous coating, and are ſaid to reſemble thoſe of the common ſparrow to ſuch a degree as to be ſcarce diſtinguiſhed from them.

PAPILIO DIOMEDES?

Character Genericus.

Antennæ apicem verſus craſſiores, ſæpius clavato-capitatæ.

Alæ ſedentis erectæ ſurſumque conniventes, (volatu diurno).

Lin. Syſt. Nat. p. 744.

Character Specificus, &c.

PAPILIO caudatus niger, alarum diſco inæqualiter cæruleo-radiato, macula nigra rotundata; poſterioribus lunulis marginalibus cæruleis.

An Var. P. Ulyſſis?

Papilio DIOMEDES.

Cram. inſ. t. 122. A.

Pap. DIOMEDES? ? ?

Lin. Syſt. Nat. p. 749.

Lin. Syſt. Nat. Gmel. p. 2236.

Indiam incolit pulcherrimus hic Papilio, magnitudine naturali in tabula depictus.

DIOMEDES?

Generic Character.

Antennæ thickening towards the upper part and generally terminating in a knob.

Wings (when ſitting) erect and meeting upwards. (Flight diurnal.)

Specific Character.

Caudated black BUTTERFLY, with the diſc of the wings unequally radiated with blue, with a round ſpot of black: the lower wings marked by a row of blue creſcents round the margin.

This moſt beautiful Inſect is a native of India, and is repreſented on the plate in its natural ſize.

CASUARIUS GALEATUS.

Character Genericus.

Roſtrum depreſſum, rectum, ſubconicum.
Nares ovatæ.
Alæ breviſſimæ, volatui inutiles.
Femora in parte inferiore denudata.
Pedes tridactyli, digitis omnibus anticis.
Cauda nulla.

Lath. ind. orn. p. 664.

Character Specificus, &c.

CASUARIUS niger, vertice galeato, collo purpureo-cæruleo, palearibus rubris.

EMEU.

Will. orn. 105. *t.* 25.

Struthio CASUARIUS.

Lin. Syſt. Nat. p. 265.

CASUARIUS Emeu.

Lath. ind. orn. p. 664.

In inſulis Indiæ orientalis præcipue conſpicitur *Caſuarius galeatus*, vel ipſi Struthio-camelo magnitudine parum cedens. Cum alarum loco ſcapos

aliquot nudos, breves, acuminatos utrinque gerat, volandi omnino inſcius eſt. Pennæ totius avis ſunt valde graciles, laxe plumatæ, et veluti duplices; duæ nempe ab eadem baſi oriuntur. Si cum hac avi comparetur Caſuarius auſtralis, quem in hoc opere jam depinximus, facile patebit ſpecies inter ſe omnino eſſe diverſas.

A N

THE

GALEATED CASSOWARY.

GENERIC CHARACTER.

Bill depreſſed, ſtrait, nearly conical.
Wings extremely ſmall, and unfit for flight.
Feet tridactylous, with all the toes ſtanding forwards.

SPECIFIC CHARACTER, &c.

Black CASSOWARY, with galeated head, and purple carunculated neck, with red wattles.

The CASSOWARY or EMEU.
Will. orn. p. 151. *pl.* 25.

Galeated CASSOWARY.
Lath. ſyn. 3. p. 10. *pl.* 72.

EMEU.
Robert icon. t. 4.

Le CASOAR.
Briſs. av. 1. p. 10. *pl.* 1. *f.* 2.
Buf. ois. 1. p. 464. Pl. enl. 313.

The Caſſowary is principally found in the Eaſt-Indian iſlands: in ſize it is but little inferior to the

 oſtrich:

oſtrich: it is totally deſtitute of the power of flight, being furniſhed only with a few ſtrong, ſhort, ſharp-pointed ſhafts or naked quills in the place of wings: the feathers throughout the whole bird are of a very ſlender form, looſely webbed, and double; i. e. two proceeding from the ſame baſe or root. The Auſtralaſian or New Holland Caſſowary has been already deſcribed in the preſent work, and from a collation of the figure of that bird with the preſent, it will readily appear that the two ſpecies are perfectly diſtinct from each other.

DIDELPHIS OBESULA.

Character Genericus.

Dentes numeroſi, parvi.
Folliculus abdominalis. (feminæ.)

Character Specificus.

DIDELPHIS ſubferruginea, ſubtus albeſcens, cauda longiuſcula, pedibus anticis pentadactylis, ungue exteriore utrinque breviſſimo; poſticis tetradactylis, digitis interioribus unitis.

Macropi potius quam Didelphidis ſpecies.

Auſtralaſiam incolit hæc ſpecies, craſſior et pinguior reliquis congeneribus. Crura poſteriora anterioribus longiora, pedeſque eodem fere more formati quo pedes *Macropi gigantei*, vulgo *Kanguroo* nominati; licet minor longe ſit digitus intermedius pro rata proportione pedis. Digiti duo interiores utrinque conjuncti, ſeu cute communi veſtiti. Magnitudo animalis eadem prope eſt ac *muris Ratti* Linnæani, ſemiadulti. Color pallido-fuſco-flaveſcit. Pilus craſſior et aſperior quam aliarum plerarumque minorum Didelphidum. Aures rotundatæ. Cauda lon-

longiuſcula. Si obiter et in tranſitu aſpiciatur hæc Didelphis, non abſimilis videtur porcello minutulo. Hanc ſpeciem primo obſervavi in Muſeo celeberrimi Joannis Hunteri, unde figura hæc noſtra vera magnitudine depingitur. Iconas quoque nonnullas vidi quas depingi curaverat Dominus White, coloniæ Britannicæ, vulgo dictæ *Botany Bay*, chirurgus primarius; quique ſpecimen ſupra dictum Domino Huntero donavit.

THE

PORCULINE OPOSSUM.

Generic Character.

Teeth numerous, ſmall.
Abdominal Pouch in the female.

Specific Character.

Subferruginous OPOSSUM, whitiſh beneath, with longiſh tail; the fore-feet pentadactylous with very ſmall exterior claws; the hind-feet tetradactylous with the two interior toes united.

In reality it is more properly a ſpecies of Macropus than Didelphis.

This ſpecies, hitherto undeſcribed, is a native of New Holland, and is remarkable for a thicker or more corpulent habit than others of the genus. The hind legs are conſiderably longer than the fore-legs, and have, in miniature, the form of thoſe of the Kanguroo and ſome other Auſtralaſian quadrupeds; though the middle claws are far leſs in proportion: the interior ones are double, or both covered by a common ſkin. The ſize of this ſpecies is nearly that

that of a ſmall or half-grown domeſtic rat. Its color is a pale yellow-brown, and its hair is of a coarſer or more harſh appearance than in the reſt of the ſmaller Opoſſums: the ears are rounded: the tail rather long. When viewed in a curſory manner the animal bears a diſtant reſemblance to a pig in miniature. I firſt obſerved this ſpecies in the Muſeum of the late Mr. John Hunter, and from the ſpecimen there preſerved the preſent figure is taken. It is repreſented in its natural ſize. I have alſo ſeen drawings of the ſame ſpecies in the collection of Mr. White, Chief Surgeon to the Settlement at Botany Bay, who preſented the above-mentioned ſpecimen to Mr. Hunter.

MEDUSA PULMO.

Character Genericus.

Corpus gelatinoſum, orbiculatum, depreſſum.
Os ſubtus, centrale.

Lin. Syſt. Nat. p. 1096.

Character Specificus, &c.

MEDUSA hemiſphærico-concava, margine fimbriato, ſubtus ſtriata, caudice quadrifeneſtrato, brachiis octo.

Macri obſerv. del polm. mar. p. 34. *t.* 1.
Lin. Syſt. Nat. Gmel. p. 3155.

PULMO marinus Matthioli.

Aldr. zooph. p. 575.
Jonſt. anim. exang. t. 19.
Seb. muſ. 3. *t.* 1. *fig.* 2.?

PULMO marinus.

Matthiol. in Dioſcor. Venetiis. 1583. p. 310.

Speciem hanc Dominus Macri quam diligenter deſcripſit in hunc modum.

" Corpus

" Corpus totum gelatinoſum, pellucidum, cryſtallinum, durum, tenax, uniforme, nitidum, cæruleſcens : Pileo maximo, hemiſphærico-concavo, quaſi uſque ad caudicis extremitatem extenſo, ſupra lævi, ſubtus cavo, ſtriato, ſtriis numeroſis, concentricis, proximis, a ſexdecim, ut plurimum ligamentis, diſtantibus, ramum unum breviſſimum utrinque emittentibus, longitudinaliter diſſectis : Margine tenui, ſubtili, membranaceo, fimbriato, fimbriis ſubrotundis, ſature cæruleis, multis, vicinis, lævibus, nitidis, ſenſim ut ad centrum accedit craſſiori, et ad centrum craſſiſſimo.

Pilei centro adnatus deſcendit caudex maximus, craſſiſſimus, tetragonus, lævis, verſus finem attenuatus, in origine 4-feneſtratus, feneſtris lateralibus, magnis, ſubpatentibus, ſemiovalibus, inferne lobo lævi majore, ſuperne minori et oppoſito donatis.

Rami octo ab ima caudicis parte prodeuntes, magni, æquales, ſubcylindracei, pendentes, anterius et lateribus læves, poſterius ſemper criſpi.

Appendices ſexdecim, ſubtrigonæ, mediocres, liberæ, æquales, veluti coronam circa caudicis finem conſtituentes, anterius bifidæ, latere ſuperiori plano denſarum rugarum terminatæ, origine uniuſcujuſque rami adnatæ, una utrinque.

Rami deſinunt in totidem pendentes, magnas, æquales, branchias, ſubpyramidales, lateribus duobus anterioribus multum extantibus, proximis, plano denſarum rugarum terminatis, ſuperficiebus lævisſimis, latere poſteriori ſive interno, remoto, minus exſtante, rugoſo, plicis ramorum continuato.

Branchiæ abeunt in octo oblonga, ſubtrigona, pen-

pendentia, æqualia corpora, magna, craſſa, lævia, in plana tria membranacea acuta, parum diſtantia, deſinentia, ſingulum unicuique lateri, in extremitate in acumen coalita.

Intra ſingulam feneſtram adeſt faſcia ſtriata, ſerpentina, flavo-cæruleſcens: an genitalia?

Mirabile viſu, hoc animal ore, arteriis, venis, nervis, (niſi ſtrias, et ligamenta nervorum munus obire cenſeas) muſculis, cerebro, medulla ſpinali, cordeque deſtitutum, vivere, nutriri, moveri, creſci, multiplicari!"

Habitat in mari Tyrrheno.

THE

PULMONIC MEDUSA.

Generic Character.

Body gelatinous, orbicular, commonly depreſſed.
Mouth central, beneath.

Specific Character.

Hemiſpherically-concave MEDUSA with fimbriated border; ſtriated beneath; the body or ſtem furniſhed with four openings and eight arms.

This curious ſpecies of Meduſa is very accurately deſcribed by Dr. Macri, nearly as follows, viz.

The whole is gelatinous, pellucid, cryſtalline, hard, tenacious, uniform, gloſſy, and blueiſh: the pileus or head is very large, hemiſpherically concave, and extended as it were to the extremity of the ſtem; it is ſmooth above, hollow beneath, and marked with numerous, concentric, approximated ſtriæ, which are cut or traverſed by ſixteen diſtant ligaments, each emitting a very ſhort branch on each ſide: the border is thin, fine, membranaceous, and fim-

fimbriated with numerous roundiſh, ſmooth, approximated, blue ſcallops: the head gradually thickens as it approaches toward the centre, where it is very thick: the body or ſtem, which deſcends from the head or pileus, is very large and thick, and is of a tetragonal form, ſmooth, attenuated towards the extremity, and furniſhed at its origin or upper part with four large, ſemi-oval, lateral windows or openings, each of which has a ſmooth and large lobe above, and a ſmaller oppoſite one below. From the lower part of the ſtem or body proceed eight large, equal, ſubcylindric, pendent branches or arms, which are ſmooth in front and on the ſides, but are always criſped or wrinkled behind: there are alſo ſixteen appendices, of a moderate ſize, and of a ſubtrigonal form, hanging looſe, and conſtituting as it were a kind of crown round the extremity of the body: theſe parts are bifid in front, and terminated on the upper ſide by a flat, thickly-wrinkled ſurface; they ariſe from the beginning of each branch, one on each ſide.

The branches end in as many large, pendent, equal, ſubpyramidal branchiæ, with their two exterior ſides very prominent, and terminating in a flat thickly-wrinkled ſurface: on their hinder or inner ſide leſs prominent, rugoſe, and continued into the plicæ of the branches: theſe branchiæ end in eight oblong, ſubtrigonal, pendent, large, thick, ſmooth bodies, terminating in three flat, acute, membranaceous pieces, and hanging at ſmall diſtances from each other. Within each of the windows or open-

openings is a kind of flexuous or ſerpentine, ſtriated faſcia, of a mixed blue and yellow tinge.

Dr. Macri concludes his deſcription by obſerving that it is wonderful that an animal apparently deſtitute of mouth, arteries, veins, nerves, muſcles, brain, ſpinal marrow, and heart, ſhould live, move, increaſe, and multiply!

It inhabits the Tuſcan ſea.

PHALÆNA AUGUSTA.

Character Genericus.

Antennæ ſetaceæ, a baſi ad apicem ſenſim attenuatæ.

Alæ (ſedentis) ſæpius deflexæ. (Volatu nocturno.)

Lin. Syſt. Nat. p. 808.

Character Specificus, &c.

PHALÆNA alis primoribus falcatis fuſcis, ſtriga ſigmoidali pallida, poſterioribus nigris macula magna rubra medio alba.

PHALÆNA Conſpicillator.

Cram. 2. p. 1. *t.* 97. A. B.

In rariſſimis phalænis exoticis numeratur ea quam in inſula Amboyna generatam magnitudine naturali oſtendit tabula. Alarum anticarum ſuperficies inferior ſtriis aliquot ſeu nubeculis albidis, in longitudinem ductis notatur; habentque nonnulla ſpecimina ſuperficiem ſuperiorem ſtria obliqua diſtinctam, quæ ipſis alis pallidior prope apices eas utrinque faſcia decorat.

AUGUSTA.

Generic Character.

Antennæ ſetaceous, decreaſing in ſize from the baſe to the point.
Wings, when at reſt, generally deflected.
Flight moſtly nocturnal.

Specific Character.

PHALÆNA with falcated brown upper wings, with a pale ſigmoid ſtreak, and black lower wings with a large red ſpot, white in the middle.

The elegant inſect here repreſented in its natural ſize is conſidered as one of the rareſt of the exotic Phalænæ. It is principally found in the iſland of Amboyna. The under ſurface of the ſuperior wings is marked by a few whitiſh, longitudinal ſtreaks; and in ſome ſpecimens an oblique ſtreak of a paler color than the reſt of the wing is ſeen on the upper ſurface; forming a band towards the tip of each wing.

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